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**OCEANOGRAPHIC OBSERVATIONS AT
OCEAN STATION P (50°N, 145°W)
VOLUME 58
Sept. 14, 1973 - Jan. 16, 1974**



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MARINE SCIENCES DIRECTORATE, PACIFIC REGION

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OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P (50°N, 145°W)

VOLUME 58

SEPTEMBER 14, 1973 - JANUARY 16, 1974

by

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C. Jackson, P. Munro, K. Abbott-Smith

Victoria, B.C.
Marine Sciences Directorate, Pacific Region
Environment Canada
April, 1974

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INTRODUCTION

Canadian operation of Ocean Weather Station P (latitude 50°00'N, longitude 145°00'W) was inaugurated in December, 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS Vancouver and the CCGS Quadra. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July, 1952. A program of more extensive oceanographic observations was commenced in August, 1956. This was further extended in April, 1959, by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections in addition to being made on Line P oceanographic stations are also made at odd meridians at 40' i.e., 139°40'W, 141°40'W, etc. These stations are known as Line P BT stations. Data observed prior to 1968 has been indexed by Collins et al, (1969).

The present record includes hydrographic and continuously sampled STD data collected from the CCGS Vancouver during the period 14 September to 2 November, 1973, from the CCGS Quadra during the period 26 October to 12 December, 1973, and from the CCGS Vancouver during the period 7 December, 1973, to 16 January, 1974.

All physical oceanographic data have been stored by the Canadian Oceanographic Data Centre (CODC), 615 Booth Street, Ottawa, Ontario, Canada. Requests for these data should be directed to CODC.

Biological and productivity data are published in the Manuscript Report series of the Fisheries Research Board of Canada (FRB), the Biological Station, Nanaimo, B.C., Canada. Requests for these data should be directed to FRB.

Marine geochemical data are for the Ocean Chemistry Group, Marine Sciences Directorate, Department of the Environment, 512-1230 Government St., Victoria, B.C., Canada.

Bird observations are sent to Dr. M. Myres, University of Calgary, Calgary, Alberta, Canada; and marine mammal observations to Mr. I. McAskie, Fisheries Research Board of Canada, the Biological Station, Nanaimo, B.C., Canada.

Program of Observations from CCGS Vancouver, September 14 to November 2, 1973
(P-73-7) (CODC Ref. No. 15-73-007)

Oceanographic observations were made by Mr. B.G. Minkley, Marine Sciences Directorate, Department of the Environment. En route to Station P, Stations 1 to 5 and 9 to 11 were occupied and a STD profile made to near bottom or 1500 metres. Stations 6, 7, 8, and 12 were missed due to insufficient time. Mechanical BT or XBT's were taken at all Line P and BT stations. Salinity, nitrate, and nutrient samples were taken from the seawater loop at all Line P stations.

At Station P the oceanographic program was carried out as follows:

I) Physical Oceanography

- 1) Profiles of salinity, temperature, and oxygen were obtained from 5 hydrographic stations to near bottom (4200 metres).
- 2) STD profiles to 1500 metres following the hydrographic stations.
- 3) STD profiles to 300 metres between the hydrographic stations.
- 4) Mechanical BT's were taken every 3 hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 5) Salinity samples daily at 0000 hrs. GMT from the seawater loop.

II) Biological and Productivity

Samples were obtained as follows:

- 1) Plankton
 - 17-150 metre vertical plankton hauls.
 - 2-1200 metre vertical plankton hauls.
 - 7-10 minute horizontal surface tows.
 - 10-microzooplankton samples from the seawater loop.
- 2) Samples for plant pigment, nitrate, and C-14 productivity were obtained from 3 hydrographic stations to 200 metres.
- 3) Only 1 salmon, but many pomfrets were caught by the crew using handlines.

III) Marine Geochemistry

Samples were obtained as follows:

- 1) Oxygen samples were taken from all hydrographic stations.
- 2) Nutrient samples were taken from standard depths to 600 metres from two of the weekly hydrographic stations.
- 3) Nutrient and salinity samples daily at 0000 hrs. GMT, and hourly sampling for one 24 hour period from the seawater loop.

- 4) Alkalinity samples once every 3 days from the seawater loop.
- 5) Air CO₂ samples weekly in quadruplicate.
- 6) Two seawater C-14 samples from the seawater loop.

IV) Marine Mammal, Bird and Data for Other Institutes

- 1) Marine mammal and bird observations were recorded.

Emergency Run

The ship left Station P on September 28 to take a sick seaman to Quatsino Sound, returned on station by September 30.

En route from Station P all stations were occupied and a STD profile made to near bottom or 1500 metres. Mechanical BT or XBT's were taken at all Line P and BT stations. Salinity, nitrate, nutrient, and alkalinity samples were taken from the seawater loop at all Line P stations.

Program of Observations from CCGS Quadra, October 26 to December 12, 1973
(P-73-8) (CODC Ref. No. 15-73-008)

Oceanographic observations were made by Messrs. C. de Jong and E.W. Marles, Marine Sciences Directorate, Department of the Environment.

En route to Station P all stations were missed due to insufficient time caused by late sailing and adverse weather conditions. XBT's were taken at all Line P and BT stations. Salinity, nitrate, nutrient, and alkalinity samples were taken from the seawater loop at all Line P stations. The surface temperature recorder, the thermosalinograph, and the P-CO₂ system were run continuously.

At Station P the oceanographic program was carried out as follows:

I) Physical Oceanography

- 1) Profiles of salinity, temperature, and oxygen were obtained from 2 hydrographic stations to near bottom (4200 metres), and 2 to 600 metres.
- 2) STD profiles to 1500 metres following the hydrographic stations.
- 3) STD profiles to 300 metres between the hydrographic stations.
- 4) Mechanical BT's were taken every 3 hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 5) Salinity sample daily at 0000 hrs. GMT from the seawater loop.

II) Biological and Productivity

Samples were obtained as follows:

- 1) Plankton
 - 4-150 metre vertical plankton hauls.
 - 1-1200 metre vertical plankton haul.
 - 3-10 minute horizontal surface tows.
 - Daily microzooplankton sampling from the seawater loop.
- 2) Samples for plant pigment, nitrate, and C-14 productivity were obtained from 2 hydrographic stations to 200 metres.
- 3) Nitrate sample daily at 0000 hrs. GMT from the seawater loop.
- 4) Approximately 100 salmon, 10 pomfrets, 1 daggertooth, and 1 handsaw fish were caught by the crew using handlines.

III) Marine Geochemistry

Samples were obtained as follows:

- 1) Oxygen samples were taken from all hydrographic stations.
- 2) Nutrient samples were taken from standard depths to 600 metres from one hydrographic station.
- 3) Nutrient samples for nitrate, silicate, and phosphate daily at 0000 hrs. GMT, and hourly sampling for one 24 hour period from the seawater loop.
- 4) Alkalinity samples once every 3 days from the seawater loop.
- 5) Air CO₂ samples weekly in quadruplicate.
- 6) Two seawater C-14 samples from the seawater loop.

IV) Marine Mammal, Bird and Data for Other Institutes

- 1) Marine mammal and bird observations were recorded.

En route from Station P only Station 7 was occupied and a STD profile made to 1500 metres. All other stations were missed due to rough seas and high winds. Mechanical BT or XBT's were taken at all Line P and BT stations. Salinity, nitrate, nutrient, and alkalinity samples were taken from the seawater loop at all stations.

Program of Observations from CCGS Vancouver, December 7, 1973 to January 16, 1974. (P-73-9) (CODC Ref. No. 15-73-009)

Oceanographic observations were made by Messrs. C. Jackson and P. Munro, Marine Sciences Directorate, Department of the Environment.

En route to Station P, Stations 1 to 6 were occupied and a STD profile made to near bottom or 1500 metres. Stations 7 to 12 were missed due to rough weather. Mechanical BT or XBT's were taken at all Line P and BT stations. Salinity, nitrate, and nutrient samples were taken from the

seawater loop at all Line P stations.

At Station P the oceanographic program was carried out as follows:

I) Physical Oceanography

- 1) Profiles of salinity, temperature, and oxygen were obtained from 5 hydrographic stations to near bottom (4200 metres).
- 2) STD profiles to 1500 metres following the hydrographic stations.
- 3) STD profiles to 300 metres between the hydrographic stations.
- 4) Mechanical BT's were taken every 3 hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 5) Salinity sample daily at 0000 hrs. GMT from the seawater loop.

II) Biological and Productivity

Samples were obtained as follows:

- 1) Plankton
Daily 150 metre vertical plankton hauls.
2-1200 metre vertical plankton hauls.
9-10 minute horizontal surface tows.
Daily microzooplankton sampling from the seawater loop.
- 2) Samples for plant pigment, nitrate, and C-14 productivity were obtained from 2 hydrographic stations to 200 metres and 3 surface samples.
- 3) An estimated 250-300 salmon were caught by the crew using handlines.

III) Marine Geochemistry

Samples were obtained as follows:

- 1) Oxygen samples were taken from all hydrographic stations.
- 2) Nutrient and alkalinity samples were taken from standard depths to 500 metres from 2 hydrographic stations.
- 3) Nutrient samples for nitrate, silicate, and phosphate daily at 0000 hrs. GMT, and hourly sampling for one 24 hour period from the seawater loop.
- 4) Alkalinity samples once every 3 days from the seawater loop.
- 5) Air CO₂ samples weekly in quadruplicate.
- 6) Two seawater C-14 samples from the seawater loop.
- 7) Three 20 minute tar ball tows at a speed of 4 knots.
- 8) Rainwater and surface seawater samples were taken for tritium analysis.

IV) Marine Mammal, Bird and Data for Other Institutes

1) Marine mammal and bird observations were recorded.

Emergency Run

For five days in the first part of the trip, the ship was involved in a search and rescue mission about 300 miles east of Station P, where the MV Oriental Monarch sank. During the run, salinities and temperatures were taken every 3 hours and positions recorded.

En route from Station P all Line P stations were missed due to rough seas and high winds. XBT's were taken at all Line P and BT stations, except Station 11½ and 11. Salinity, nitrate, nutrient, and alkalinity samples were taken from the seawater loop at all Line P stations.

Data was processed by Messrs. C. de Jong, B. Minkley, E. Marles, and E. Luscombe, and assembled and edited for publication by Mr. C. de Jong.

Observational Procedures

Temperatures at depth were measured by deep-sea reversing thermometers of German (Richter and Wiese) or Japanese (Yoshino Keiki Co.) manufacture. Two protected thermometers were used on all Nansen bottles, and one unprotected thermometer was used on each bottle at depths of 300 m or greater. The accuracy of protected reversing thermometers is believed to be $\pm 0.02^{\circ}\text{C}$.

Surface water temperatures were measured from a bucket sample using a deck thermometer of $\pm 0.1^{\circ}\text{C}$ accuracy.

Salinity determinations were made aboard ship with either an Auto-Lab Model 601 Mark 111 inductive salinometer or a Hytech Model 6220 lab salinometer. Accuracy using duplicate determinations is estimated to be ± 0.003 ppt.

Depth determinations were made using the "depth difference" method described in the U.S.N. Hydrographic Office Publication No. 607 (1955). Depth estimates have an approximate accuracy of ± 5 m for depths less than 1000 m, and $\pm 0.5\%$ of depth for depths greater than 1000 m.

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Carpenter, 1965).

Line P engine intake continuous temperatures on both ships were recorded by a Honeywell Model 15303836 Recorder. The temperature probe is at a depth of approximately 3 metres below the sea surface and the instrument accuracy is believed to be $\pm 0.1^{\circ}\text{C}$.

CCGS Quadra is equipped with a Bissett Berman Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of

surface temperatures and salinities from the ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder is situated in the dry lab. The accuracy of this instrument is believed to be $\pm 0.1^{\circ}\text{C}$ for temperature and ± 0.1 ppt for salinity.

CCGS Vancouver and CCGS Quadra were equipped with a Bissett-Berman Model 9006 STD.

Computations

All hydrographic data were processed with the aid of an IBM 360 computer. Reversing thermometer temperature corrections, thermometric depth calculations, and accepted depth from the "depth difference" method were computed. Extraneous thermometric depths caused by thermometer malfunctions are automatically edited and replaced. A Calcomp 565 Offline Plotter was used to plot temperature-salinity and temperature-oxygen diagrams, as well as plots of temperature, salinity, and dissolved oxygen vs \log_{10} depth. These plots were used to check the data for errors.

Missing hydrographic data were obtained using a weighted parabolae interpolation method (Reiniger and Ross, 1968). These data are indicated with an asterisk in this data record.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from punch card and magnetic tape records.

Analog records from the salinity-temperature-pressure instrument have been machine digitized, then replotted using the Calcomp Plotter.

Digitization was continued until original and computer plotted traces were coincident. Temperature and salinity values were listed at standard pressures; integrals (depths, geopotential anomaly, and potential energy anomaly) were computed from the entire array of digitized data.

The headings for the data listings are explained as follows:

PRESS	is pressure (decibars)
TEMP	is temperature (degrees Celsius)
SAL	is salinity (parts per thousand)
DEPTH	is reported in metres
SIGMA-T	is specific gravity anomaly
SVA	is specific volume anomaly
THETA	is potential temperature (degrees Celsius)

SVA (THETA)	is potential specific volume anomaly
DELTA D	is geopotential anomaly (J/kg)
POT EN	is potential energy in units of 10^8 ergs/cm ²
OXY	is the concentration of dissolved oxygen expressed in millilitres per litre
B-V PERIOD	is the Brunt-Vaisala period in minutes

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- Reiniger, R.F., and C.K. Ross. 1968. A method of interpolation with application to oceanographic data. *Deep Sea Res.*, 15: 185-193.
- U.S.N. Hydrographic Office. 1955. Instruction manual for oceanographic observations, Publ. no. 607.

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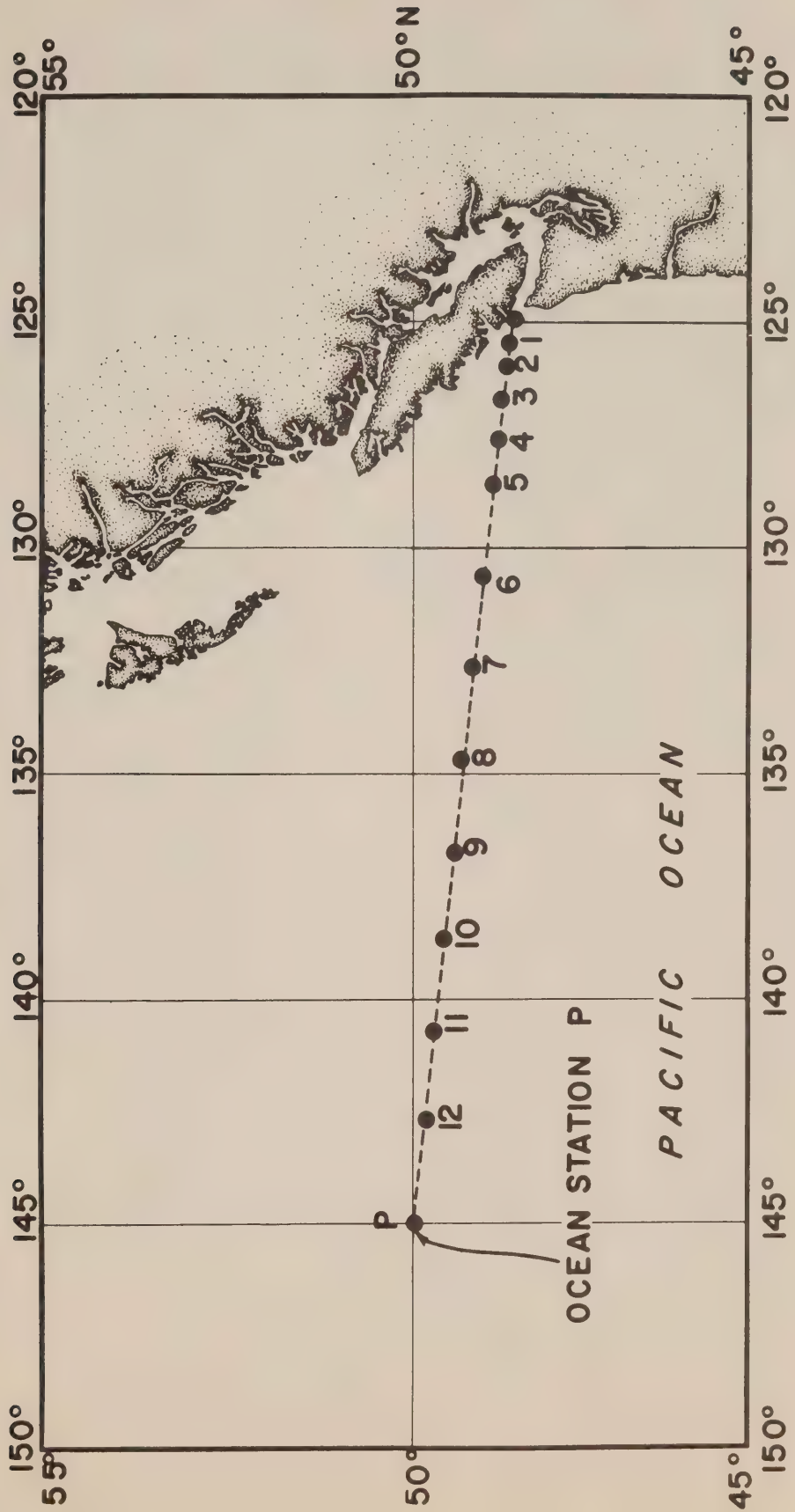


Fig. 1 Chart showing Line P station positions.

OCEANOGRAPHIC DATA OBTAINED ON CRUISE P-73-7
(CODC REFERENCE NO. 15-73-007)

RESULTS OF HYDROGRAPHIC OBSERVATIONS

(P-73-7)

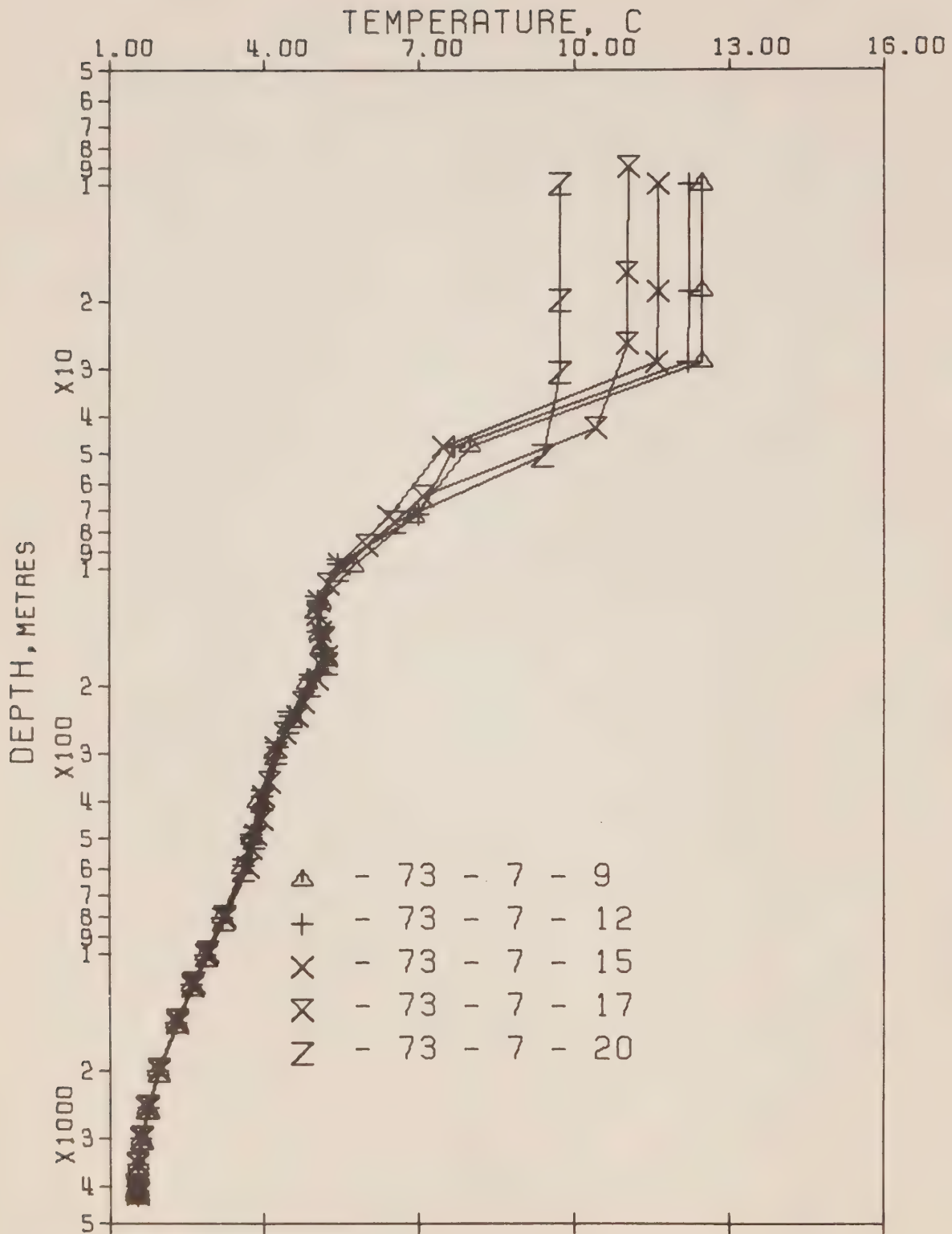


Figure 2 Composite plot of temperature vs \log_{10} depth. P-73-7.

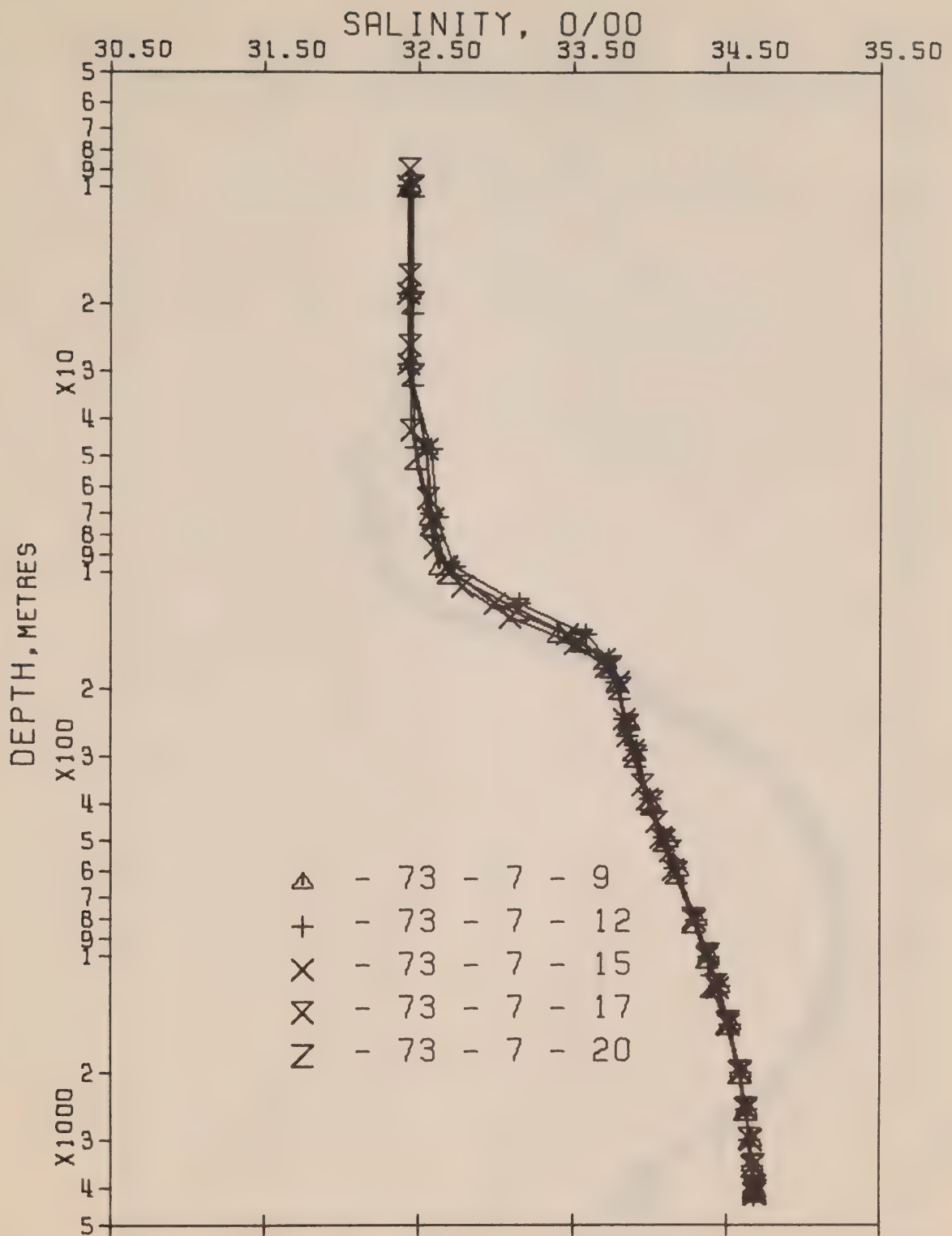


Figure 3 Composite plot of salinity vs \log_{10} depth. P-73-7.

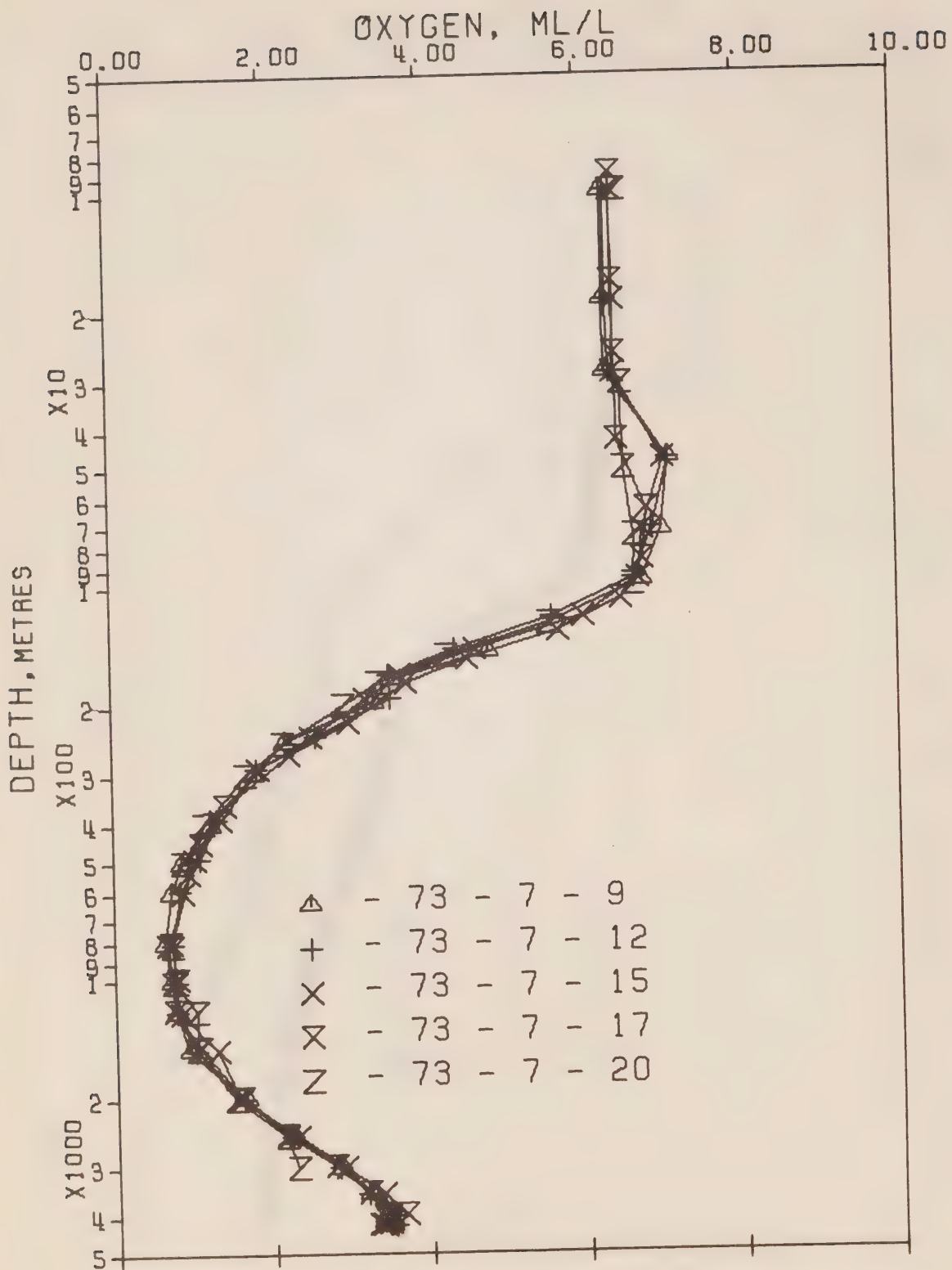
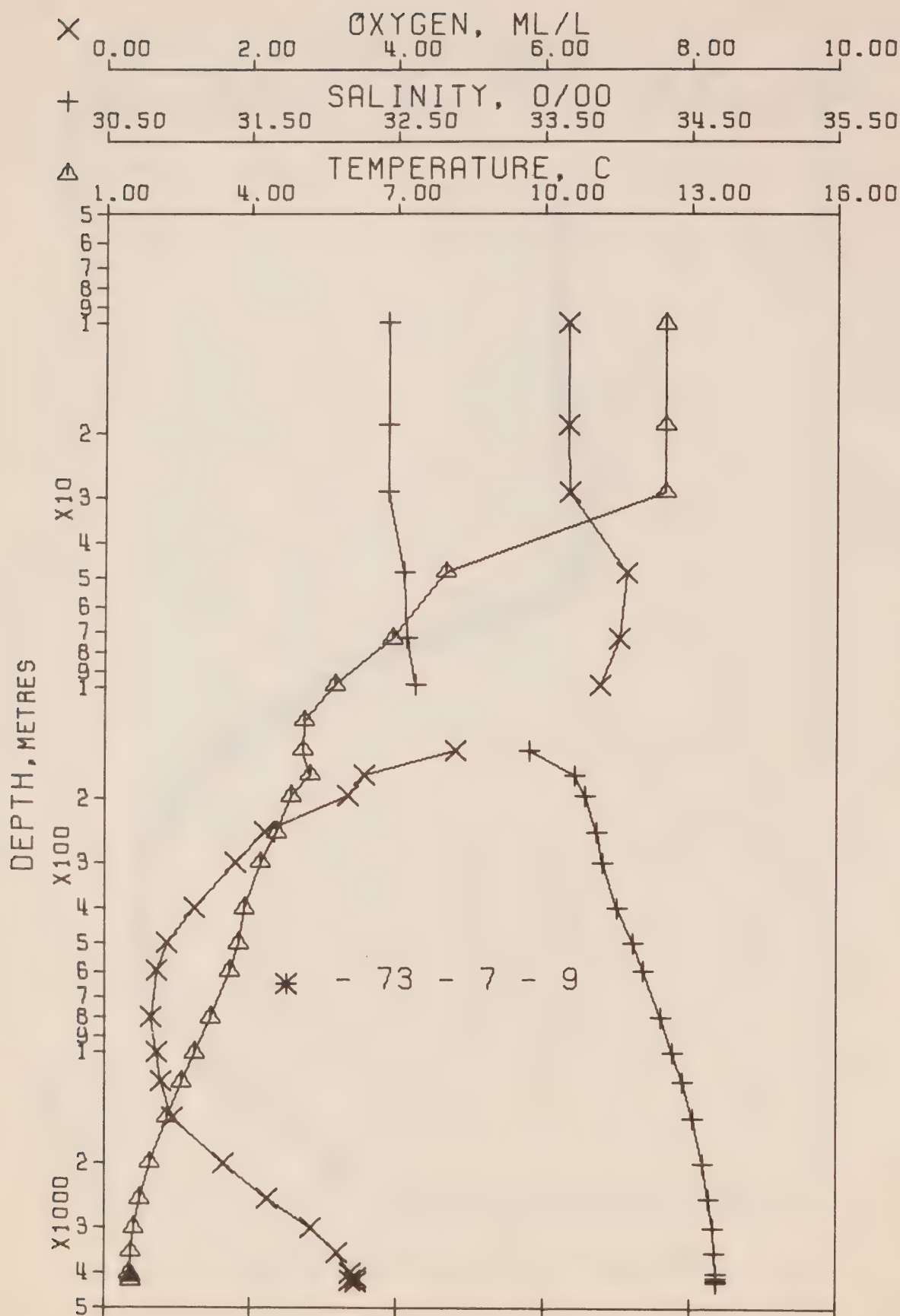


Figure 4 Composite plot of oxygen vs \log_{10} depth. P-73-7.



DATE 18/ 9/73

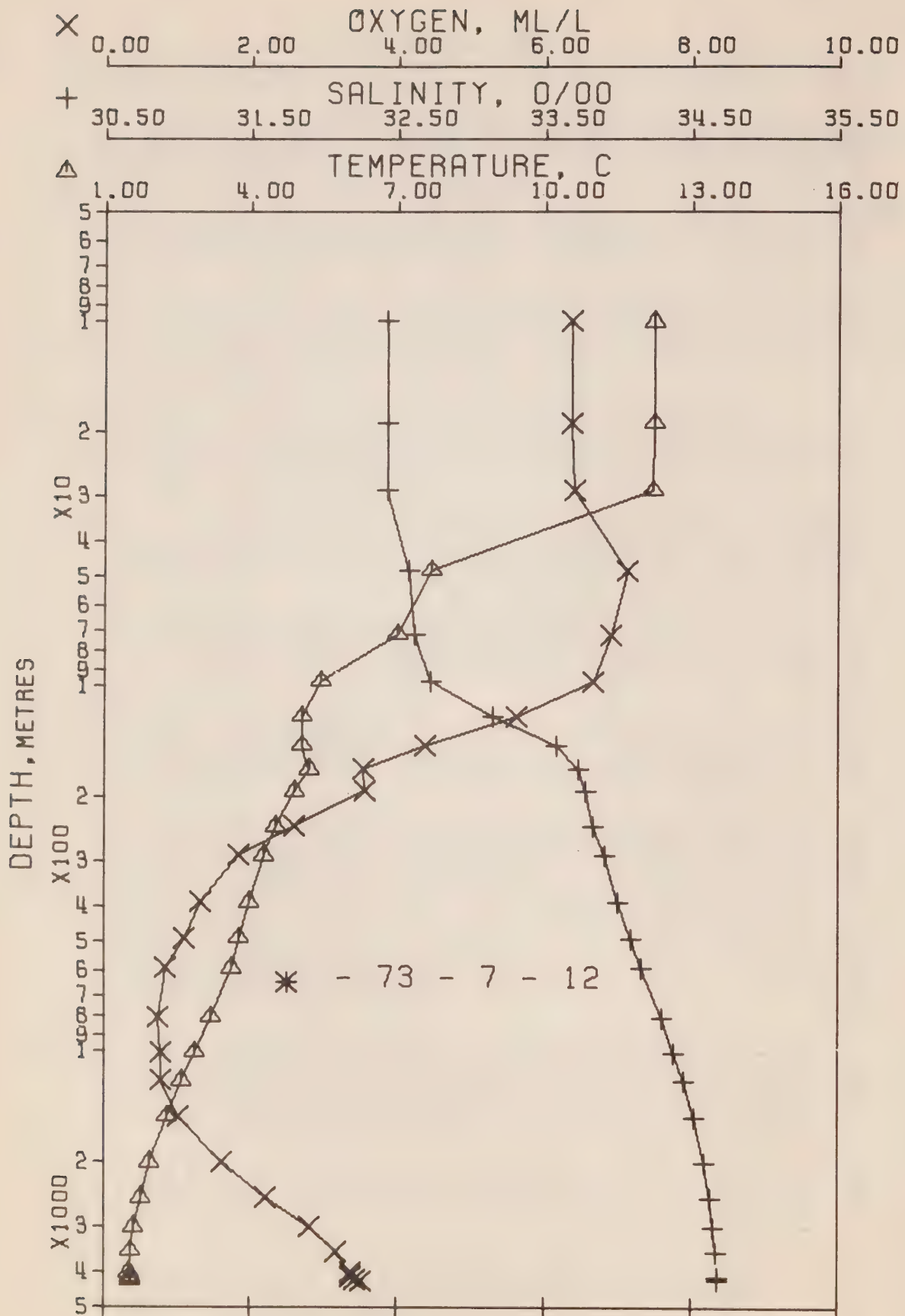
REFERENCE NO. 73- 7- 9

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N. 145- 0.0 W GMT 17.9

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
9	12.45	32.434	0	24.537	341.0	12.45	340.7	0.0	0.0	6.40	1496.
10	12.46	32.437	10	24.538	341.2	12.46	340.7	0.34	0.02	6.33	1496.
19	12.46	32.441	19	24.541	341.0	12.46	340.4	0.65	0.06	6.33	1496.
29	12.45	32.437	29	24.540	341.4	12.45	340.5	1.00	0.15	6.34	1496.
48	7.98	32.552	48	25.381	261.4	7.98	260.4	1.58	0.37	7.13	1480.
73	6.90	32.573	73	25.547	245.8	6.89	244.5	2.20	0.76	7.01	1477.
99	5.74	32.629	98	25.738	227.8	5.73	226.5	2.80	1.29	6.76	1472.
124	5.12	32.971*	123	26.080	195.5	5.11	194.0	3.33	1.90	0.0	1471.
149	5.09	33.397	148	26.420	163.5	5.08	161.6	3.78	2.52	4.80	1472.
174	5.23	33.706	173	26.648	142.2	5.22	139.9	4.17	3.15	3.57	1473.
199	4.84	33.778	198	26.750	132.7	4.82	130.2	4.51	3.80	3.33	1472.
251	4.53	33.856	249	26.846	124.0	4.51	121.1	5.16	5.31	2.20	1472.
302	4.22	33.900	300	26.914	117.8	4.20	114.7	5.78	7.06	1.79	1471.
405	3.89	34.002	402	27.029	107.6	3.86	103.7	6.94	11.23	1.24	1472.
505	3.76	34.107	501	27.125	99.2	3.72	94.5	7.97	16.01	0.85	1473.
602	3.59	34.184	597	27.203	92.3	3.55	87.0	8.90	21.24	0.72	1474.
809	3.18	34.302	802	27.336	80.6	3.12	74.4	10.68	34.07	0.65	1476.
1012	2.86	34.384	1002	27.431	72.4	2.79	65.3	12.23	48.39	0.71	1478.
1215	2.58	34.449	1203	27.507	65.7	2.50	58.0	13.63	64.30	0.79	1480.
1521	2.29	34.518	1504	27.587	58.9	2.19	50.3	15.52	90.68	0.94	1484.
2033	1.94	34.592	2008	27.674	51.5	1.80	41.8	18.32	141.43	1.55	1491.
2546	1.72	34.632	2512	27.723	47.7	1.54	37.0	20.85	200.49	2.25	1499.
3060	1.61	34.656	3015	27.750	46.1	1.38	34.1	23.25	269.06	2.84	1507.
3573	1.54	34.673	3517	27.769	45.3	1.26	32.0	25.59	348.21	3.19	1516.
4087	1.51	34.682	4018	27.779	45.7	1.18	30.7	27.91	438.68	3.38	1524.
4190	1.54	34.683	4118	27.777	46.3	1.19	30.7	28.38	458.60	3.47	1526.
4282	1.54	34.680	4208	27.775	46.8	1.18	30.9	28.81	477.19	3.38	1523.
4291	1.54	34.680	4217	27.775	46.8	1.18	30.9	28.85	479.08	3.45	1528.

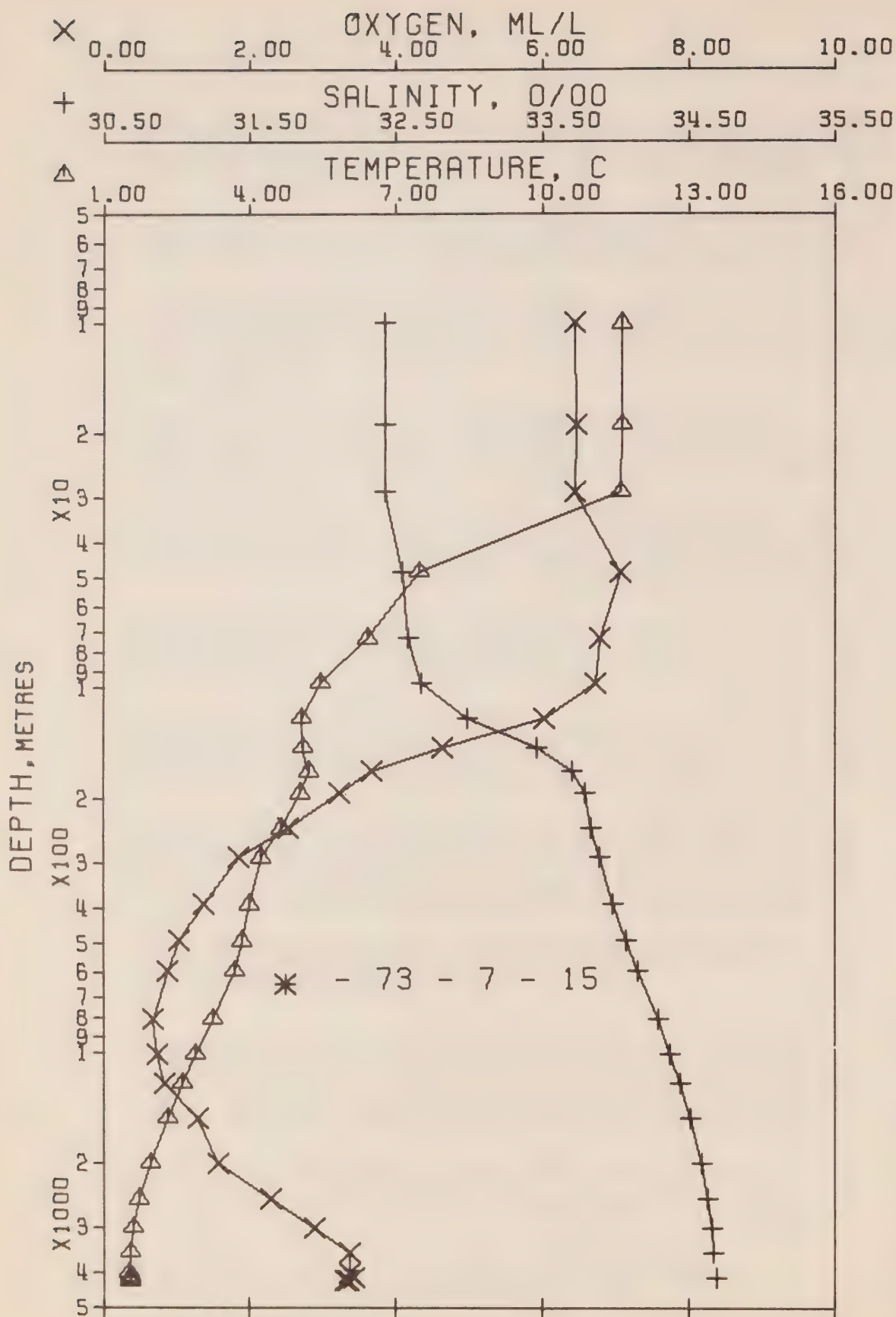


OFFSHORE OCEANOGRAPHY GROUP
 POSITION 49-59.0 N, 145- 3.0 W GMT 17.7
 HYDROGRAPHIC CAST DATA

REFERENCE NO. 73- 7- 12

DATE 24/ 9/73

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	12.21	32.429	0	24.579	337.0	12.21	336.7	0.0	0.0	6.38	1495.
10	12.23	32.426	10	24.573	337.8	12.23	337.4	0.34	0.02	6.35	1495.
19	12.22	32.428	19	24.576	337.7	12.22	337.0	0.64	0.06	6.35	1495.
29	12.18	32.431	29	24.586	337.0	12.18	336.0	0.99	0.15	6.39	1495.
48	7.68	32.576	48	25.443	255.5	7.68	254.5	1.56	0.37	7.11	1479.
72	7.00	32.619	72	25.570	243.6	6.99	242.4	2.15	0.74	6.90	1477.
98	5.43	32.735	97	25.858	216.4	5.42	215.1	2.73	1.24	6.65	1471.
122	5.05	33.149	121	26.229	181.3	5.04	179.8	3.21	1.78	5.63	1471.
146	5.04	33.576	145	26.558	149.4	5.03	147.6	3.61	2.32	4.38	1472.
170	5.21	33.732	169	26.671	140.0	5.20	137.7	3.95	2.88	3.54	1473.
195	4.89	33.778	194	26.744	133.2	4.87	130.8	4.30	3.52	3.56	1472.
244	4.51	33.831	242	26.828	125.5	4.49	122.8	4.92	4.91	2.60	1471.
293	4.27	33.907	291	26.914	117.7	4.25	114.7	5.52	6.55	1.84	1471.
393	3.97	33.996	390	27.016	108.7	3.94	104.9	6.65	10.49	1.32	1472.
494	3.75	34.088	490	27.111	100.3	3.72	95.9	7.70	15.25	1.09	1473.
596	3.60	34.161	591	27.184	94.1	3.56	88.9	8.69	20.76	0.84	1474.
811	3.18	34.296	804	27.332	81.1	3.12	74.8	10.57	34.23	0.74	1476.
1014	2.85	34.381	1004	27.429	72.6	2.78	65.4	12.12	48.64	0.78	1478.
1216	2.58	34.447	1204	27.506	65.9	2.50	58.1	13.52	64.53	0.79	1480.
1522	2.28	34.517	1505	27.587	58.9	2.18	50.3	15.41	90.95	1.02	1484.
2035	1.93	34.589	2010	27.673	51.7	1.79	41.9	18.22	141.86	1.62	1491.
2549	1.74	34.631	2515	27.721	48.0	1.56	37.2	20.76	201.42	2.21	1499.
3065	1.60	34.654	3020	27.750	46.1	1.37	34.2	23.18	270.62	2.83	1507.
3579	1.54	34.675	3523	27.771	45.3	1.26	31.8	25.53	350.02	3.19	1516.
4092	1.51	34.685*	4023	27.781	45.4	1.18	30.6	27.93	440.13	3.38	1524.
4194	1.53	34.684	4122	27.779	46.1	1.18	30.6	28.30	459.75	3.39	1526.
4286	1.54	34.681	4212	27.776	46.7	1.18	30.9	28.73	478.38	3.44	1528.
4297	1.53	34.681*	4222	27.776	46.6	1.17	30.9	28.78	480.48	3.53	1528.

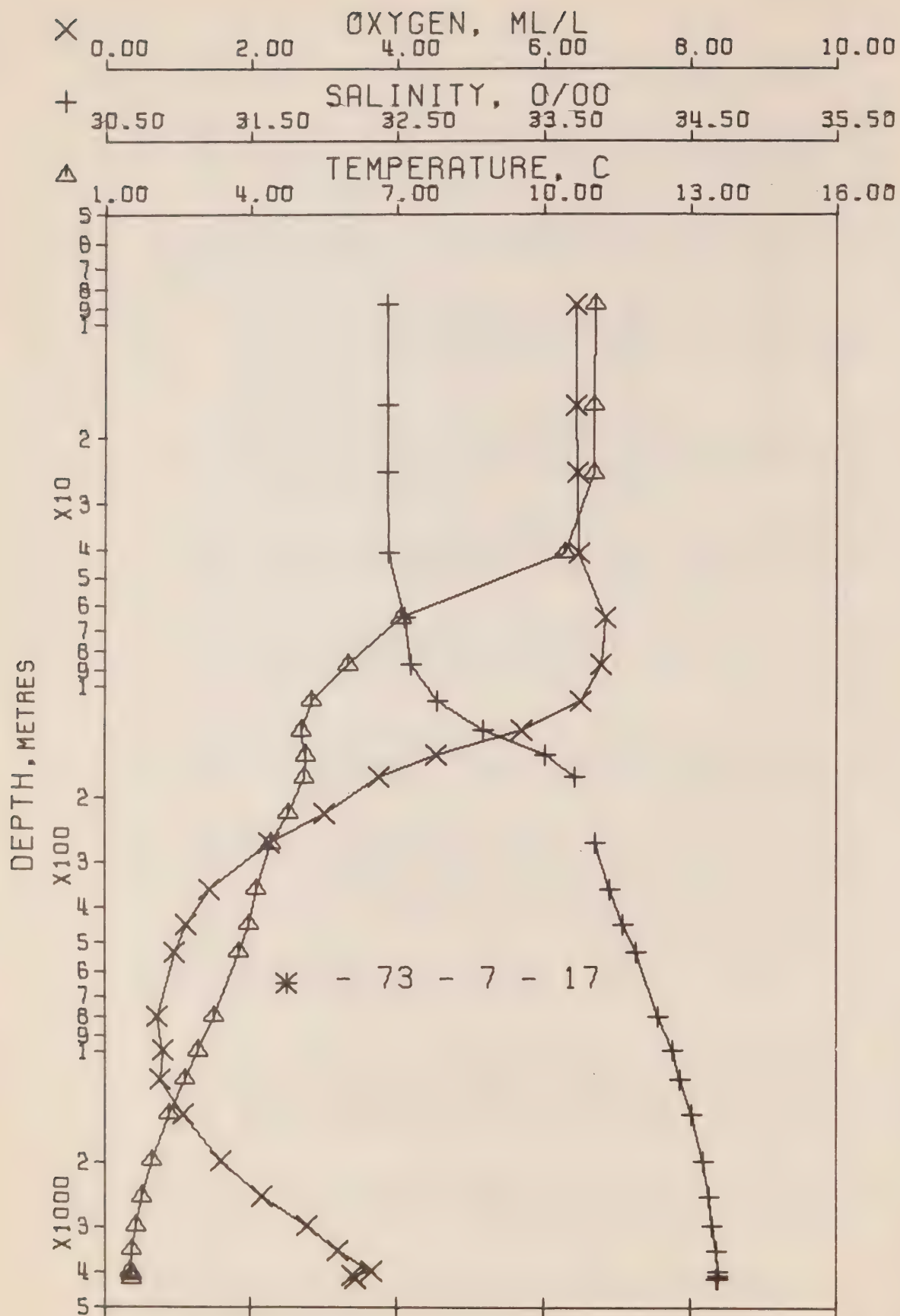


OFFSHORE OCEANOGRAPHY GROUP
 POSITION 49-58.0 N, 144-56.0 W GMT 22.3
 HYDROGRAPHIC CAST DATA

REFERENCE NO. 73- 7- 15

DATE 3/10/73

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	XY	SOUND
0	11.61	32.434	0	24.694	326.1	11.61	325.8	0.0	0.0	6.65	1493.
10	11.63	32.433	10	24.690	326.6	11.63	325.2	0.33	0.02	6.45	1493.
19	11.62	32.434	19	24.692	326.7	11.62	325.9	0.62	0.06	6.45	1493.
29	11.60	32.434	29	24.696	326.5	11.60	325.6	0.95	0.14	6.44	1493.
48	7.48	32.549	48	25.449	254.9	7.48	253.9	1.51	0.36	7.06	1479.
73	6.43	32.587	73	25.619	238.9	6.42	237.7	2.12	0.74	6.77	1475.
98	5.48	32.679	97	25.808	221.1	5.47	219.8	2.68	1.23	6.72	1471.
122	5.08	32.988	121	26.098	193.7	5.07	192.2	3.18	1.79	6.01	1471.
146	5.10	33.459	145	26.468	158.9	5.09	157.0	3.61	2.37	4.64	1472.
170	5.22	33.696	169	26.642	142.8	5.21	140.6	3.97	2.95	3.59	1473.
195	5.06	33.787	194	26.732	134.4	5.04	132.0	4.32	3.60	3.23	1473.
244	4.65	33.829	242	26.811	127.2	4.63	124.4	4.95	5.01	2.54	1472.
293	4.24	33.888	291	26.902	118.8	4.22	115.8	5.55	6.67	1.87	1471.
393	4.00	33.981	390	27.001	110.2	3.97	106.4	6.69	10.65	1.37	1472.
495	3.85	34.075	491	27.091	102.4	3.81	97.8	7.77	15.55	1.05	1473.
599	3.71	34.155	594	27.168	95.7	3.67	90.4	8.80	21.29	0.88	1474.
811	3.24	34.292	804	27.323	82.0	3.18	75.6	10.68	34.78	0.69	1475.
1014	2.90	34.357	1004	27.414	74.1	2.83	67.0	12.25	49.42	0.74	1478.
1217	2.61	34.438	1205	27.496	66.9	2.53	59.0	13.69	65.70	0.83	1480.
1523	2.31	34.508	1506	27.577	59.9	2.21	51.2	15.61	92.56	1.30	1494.
2033	1.95	34.588	2008	27.670	51.9	1.81	42.2	18.43	143.73	1.59	1491.
2543	1.73	34.628	2509	27.719	48.1	1.55	37.3	20.97	202.88	2.30	1499.
3055	1.61	34.656	3010	27.750	46.1	1.38	34.1	23.37	271.35	2.90	1507.
3556	1.54	34.675	3510	27.771	45.2	1.26	31.3	27.33	374.80	3.37	1515.
4077	1.52		4007							3.37	
4179	1.53	34.688	4106	27.782	45.8	1.19	30.4			3.43	1526.
4270	1.54		4196							3.33	
4279	1.53		4205							3.37	

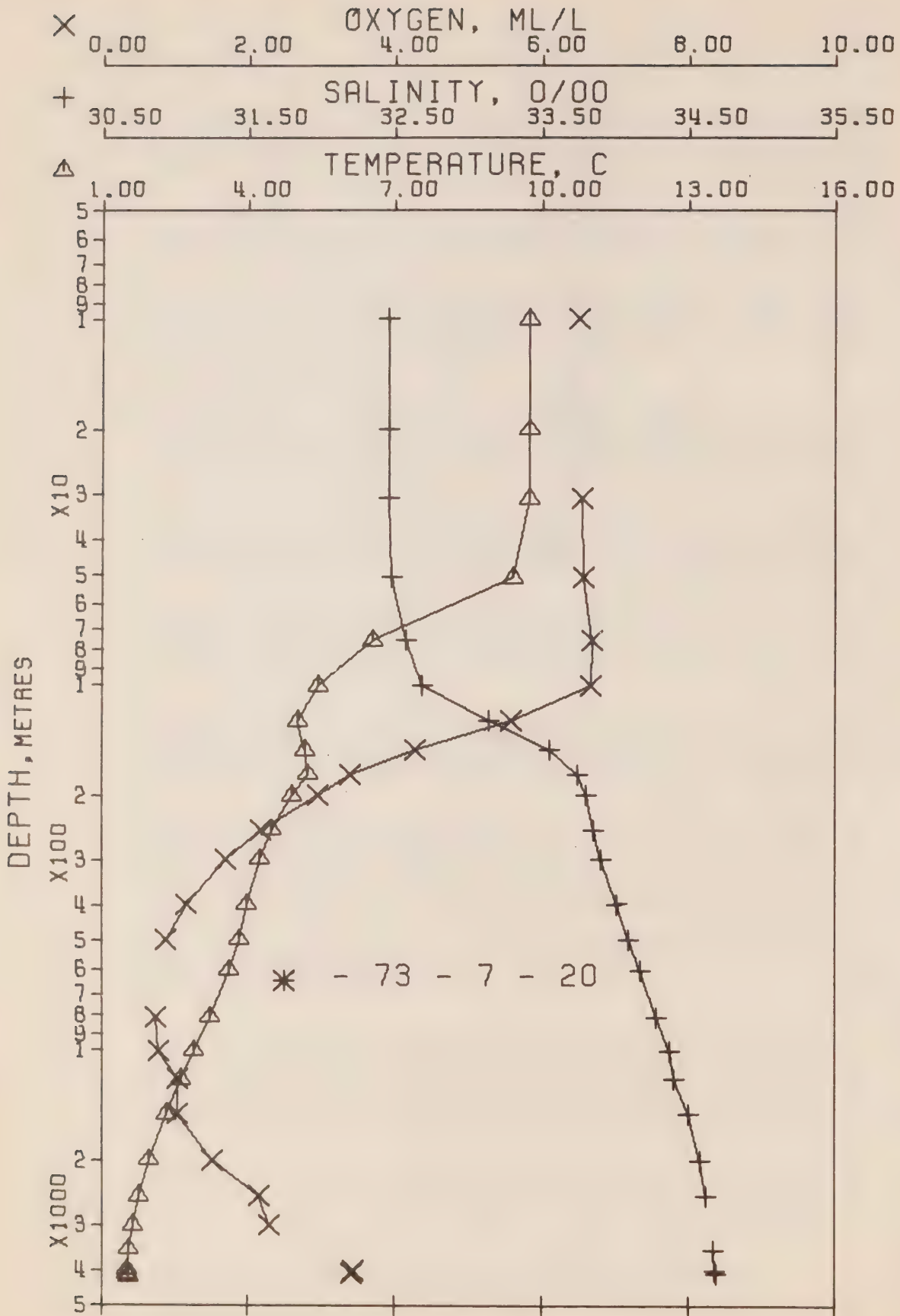


OFFSHORE OCEANOGRAPHY GROUP
 POSITION 49-55.0 N, 144-50.0 W GMT 18.1
 HYDROGRAPHIC CAST DATA

REFERENCE NO. 73- 7- 17

DATE 12/10/73

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	XY	SOUND
0	11.03	32.440	0	24.803	315.7	11.03	315.5	0.0	0.0	0.55	1491.
9	11.04	32.442	9	24.803	315.9	11.04	315.5	0.29	0.01	6.45	1491.
17	11.03	32.442	17	24.805	315.9	11.03	315.3	0.54	0.05	6.44	1491.
26	11.03	32.445	26	24.807	315.9	11.03	315.0	0.83	0.11	6.45	1491.
43	10.43	32.446	43	24.912	306.2	10.42	305.1	1.36	0.30	6.47	1489.
65	7.08	32.565	65	25.517	248.6	7.07	247.4	1.98	0.64	6.84	1477.
83	6.02	32.603	87	25.683	232.9	6.01	231.7	2.51	1.05	6.79	1473.
110	5.26	32.778	109	25.911	211.3	5.25	209.9	3.00	1.55	6.49	1471.
133	5.04	33.093	132	26.185	185.5	5.03	183.9	3.46	2.12	5.70	1471.
155	5.15	33.509	154	26.502	155.8	5.14	153.9	3.84	2.67	4.54	1472.
178	5.12	33.712	177	26.666	140.5	5.11	138.3	4.18	3.25	3.76	1473.
224	4.79	33.850*	222	26.812	127.0	4.77	124.4	4.77	4.47	3.03	1472.
270	4.43	33.852	268	26.854	123.4	4.41	120.4	5.35	5.93	2.25	1472.
361	4.11	33.951	358	26.966	113.3	4.08	109.7	6.43	9.39	1.45	1472.
450	3.96	34.037	446	27.050	106.0	3.93	101.8	7.40	13.40	1.13	1473.
535	3.77	34.131	531	27.143	97.7	3.73	92.8	8.28	17.79	0.95	1473.
805	3.26	34.283	798	27.314	82.9	3.20	76.4	10.68	34.28	0.73	1476.
1001	2.93	34.381	991	27.422	73.3	2.86	66.1	12.20	48.26	0.80	1478.
1199	2.64	34.435	1187	27.491	67.3	2.56	59.5	13.59	63.85	0.76	1480.
1498	2.32	34.511	1482	27.579	59.6	2.22	51.1	15.49	89.83	1.09	1484.
2006	1.97	34.588	1982	27.669	52.1	1.83	42.4	18.29	139.98	1.60	1491.
2519	1.75	34.630	2485	27.719	48.2	1.57	37.3	20.84	198.82	2.16	1498.
3032	1.62	34.654	2988	27.748	46.3	1.39	34.3	23.26	267.26	2.79	1507.
3543	1.54	34.677	3487	27.772	45.0	1.27	31.7	25.58	345.13	3.21	1515.
4045	1.51	34.688	3977	27.783	45.0	1.18	30.3	27.92	431.76	3.67	1523.
4144	1.53	34.688	4074	27.782	45.7	1.19	30.4	28.27	450.61	3.40	1525.
4233	1.54	34.688	4160	27.781	46.1	1.19	30.4	28.67	467.74	3.45	1527.
4243	1.53	34.678	4170	27.774	46.6	1.18	31.0	28.72	469.79	3.43	1527.



OFFSHORE OCEANOGRAPHY GROUP
 POSITION 50-2.0 N, 145- 8.0 W GMT 9.4
 HYDROGRAPHIC CAST DATA

REFERENCE NO. 73- 7- 20

DATE 22/10/73

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	9.71	32.464	0	25.046	292.6	9.71	292.3	0.0	0.0	6.69	1486.
10	9.73	32.465	10	25.043	293.0	9.73	292.5	0.29	0.02	6.50	1486.
20	9.72	32.465	20	25.045	293.0	9.72	292.4	0.59	0.06	0.0	1486.
31	9.72	32.465	31	25.045	293.2	9.72	292.3	0.91	0.15	6.53	1487.
51	9.41	32.482	51	25.108	287.6	9.40	286.4	1.50	0.39	6.57	1486.
76	6.55	32.585	76	25.602	240.5	6.54	239.4	2.17	0.82	6.69	1475.
102	5.43	32.688	101	25.821	219.8	5.42	218.5	2.75	1.35	6.65	1471.
127	5.03	33.143	126	26.226	181.6	5.02	180.0	3.25	1.94	5.58	1471.
152	5.16	33.550	151	26.533	152.8	5.15	150.9	3.67	2.53	4.28	1472.
177	5.22	33.743	176	26.679	139.4	5.21	137.0	4.04	3.14	3.39	1473.
202	4.90	33.803	201	26.763	131.5	4.88	129.1	4.38	3.80	2.95	1472.
252	4.49	33.852	250	26.847	123.8	4.47	121.0	5.00	5.25	2.18	1471.
302	4.23	33.902	300	26.914	117.8	4.21	114.6	5.61	6.97	1.70	1471.
402	3.96	34.006	399	27.025	108.0	3.93	104.1	6.74	11.01	1.15	1472.
504	3.81	34.095	500	27.111	100.6	3.77	95.9	7.80	15.91	0.98	1473.
609	3.52	34.170	604	27.189	93.7	3.53	88.4	8.32	21.69	0.0	1474.
821	3.21	34.281	814	27.317	82.6	3.15	76.2	10.68	35.30	0.74	1476.
1015	2.90	34.369	1005	27.415	73.9	2.83	66.8	12.19	49.38	0.77	1478.
1212	2.61	34.400	1200	27.466	69.7	2.53	61.9	13.60	65.46	1.03	1480.
1514	2.32	34.505	1497	27.574	60.2	2.22	51.5	15.56	92.55	1.05	1484.
2027	1.97	34.582	2002	27.664	52.6	1.83	42.8	18.40	144.04	1.52	1491.
2545	1.74	34.624	2512	27.715	48.5	1.56	37.7	21.01	204.89	2.16	1499.
3065	1.62	34.654*	3020	27.748	46.4	1.39	34.3	23.46	275.00	2.30	1507.
3575	1.53	34.672	3519	27.769	45.2	1.25	32.0	25.79	353.83	0.0	1515.
4069	1.50	34.678	4000	27.776	45.7	1.17	31.0	28.03	441.10	3.44	1524.
4165	1.52	34.686	4094	27.781	45.7	1.18	30.5	28.47	459.60	3.43	1529.
4250	1.54	34.693*	4177	27.785	45.8	1.19	29.9	28.96	476.33	0.0	1527.

RESULTS OF STD OBSERVATIONS

(P-73-7)

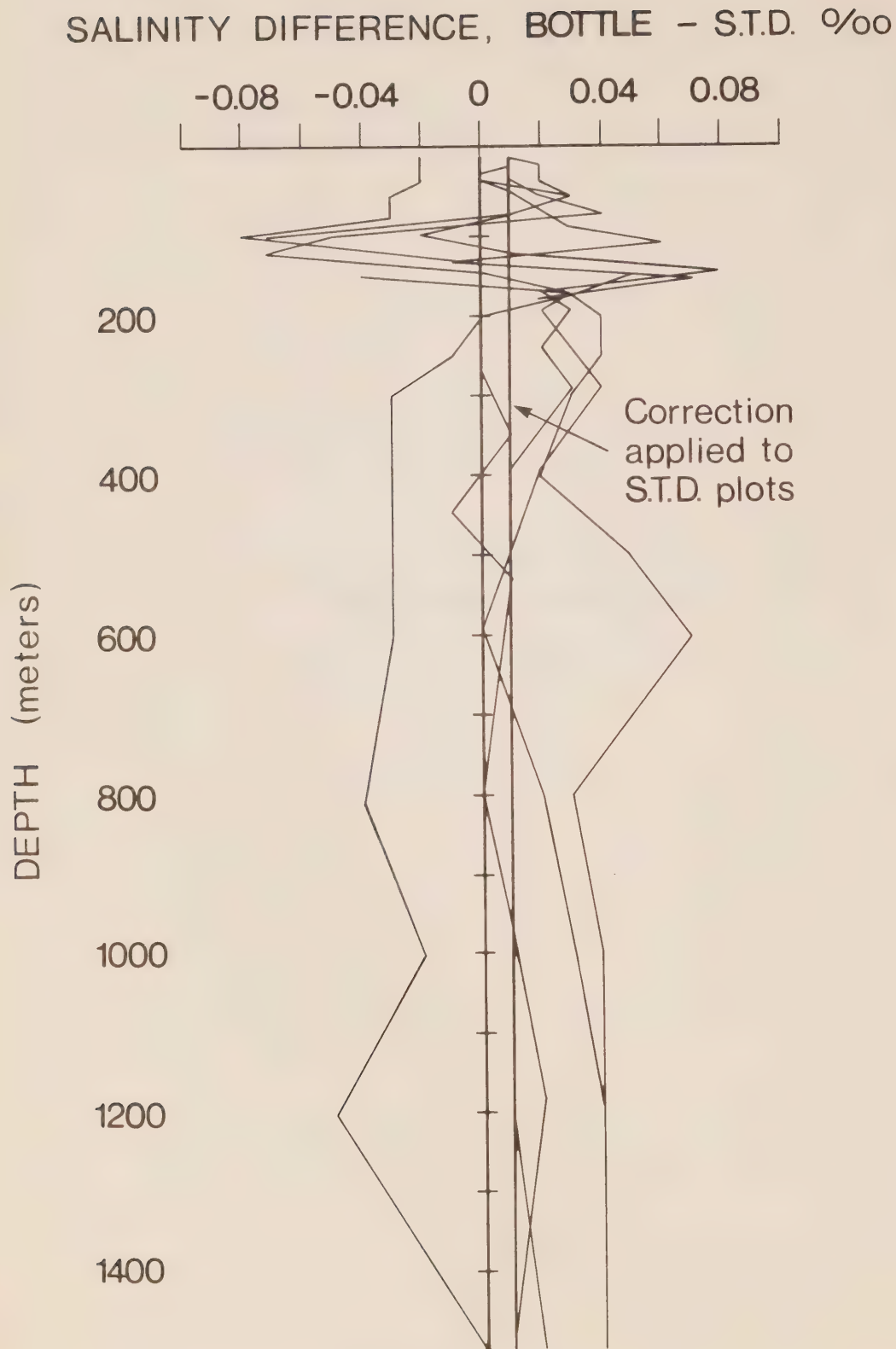


Figure 5 Salinity difference between hydro data and STD. P-73-7.

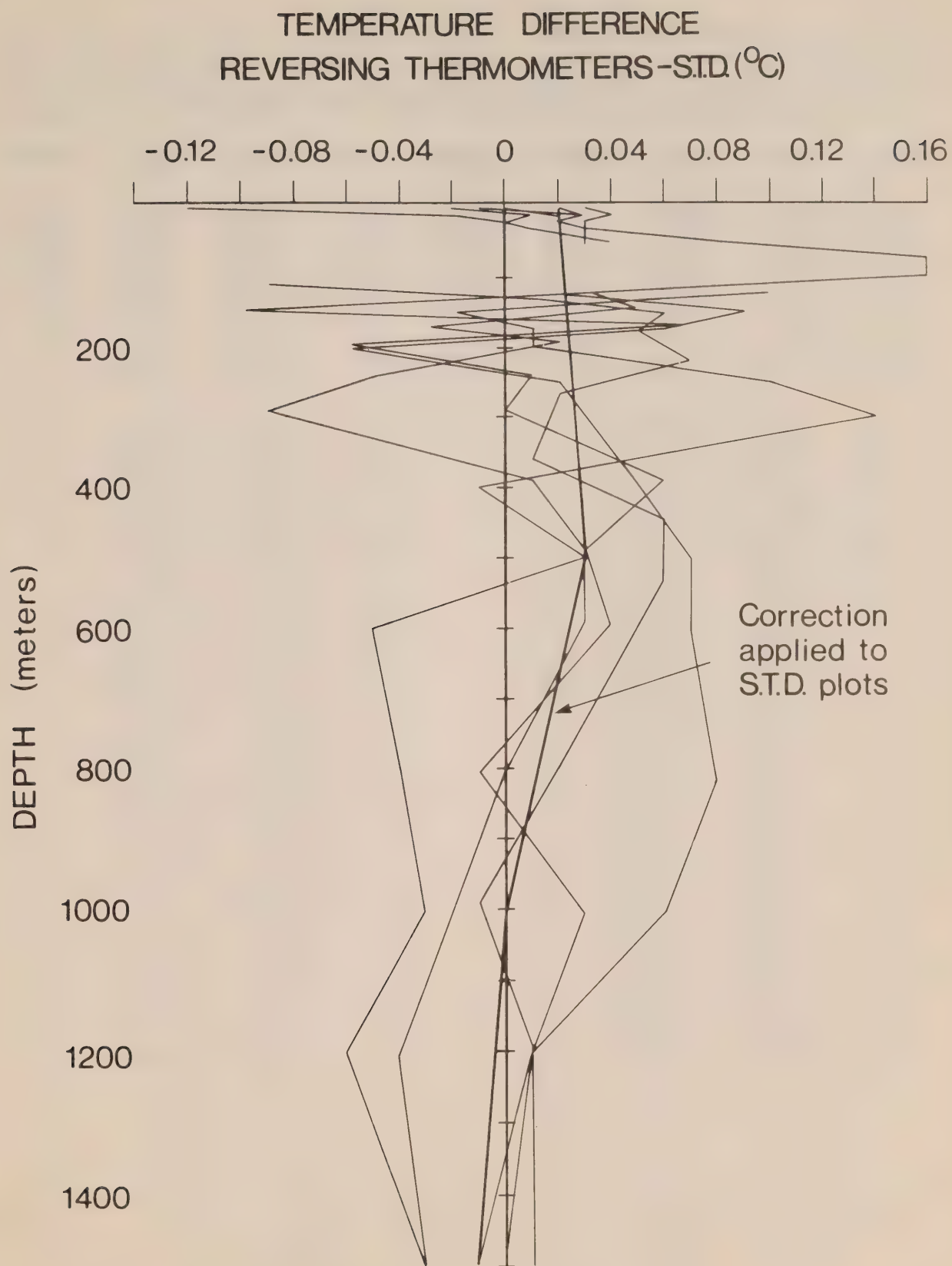


Figure 6 Temperature difference between hydro data and STD. P-73-7.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- 7- 1

DATE 15/ 9/73

POSITION 48-33.0N, 125-33.0W GMT 3.7

RESULTS OF STP CAST 54 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.77	32.26	0	24.71	324.5	0.0	0.0	1490.
10	10.28	32.52	10	24.99	297.7	0.32	0.02	1488.
20	8.29	33.04	20	25.72	228.8	0.57	0.05	1482.
30	7.08	33.40	30	26.17	185.8	0.78	0.11	1478.
50	6.80	33.63	50	26.39	165.1	1.13	0.25	1477.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	10.77	32.26	32.	7.05	33.40
1.	10.87	32.27	33.	7.05	33.41
2.	10.81	32.28	34.	7.04	33.42
3.	10.76	32.28	35.	7.02	33.42
3.	10.71	32.30	36.	6.98	33.42
4.	10.57	32.30	37.	6.96	33.47
5.	10.43	32.31	38.	6.94	33.47
7.	10.35	32.32	39.	6.94	33.48
8.	10.32	32.37	39.	6.94	33.49
9.	10.23	32.47	40.	6.94	33.49
10.	10.28	32.52	41.	6.93	33.50
11.	10.31	32.52	42.	6.89	33.53
13.	9.70	32.54	43.	6.88	33.55
14.	9.37	32.94	45.	6.84	33.60
15.	8.89	32.94	45.	6.83	33.61
16.	8.58	32.95	48.	6.81	33.62
18.	8.53	32.97	49.	6.80	33.63
19.	8.47	32.97	52.	6.80	33.64
21.	8.12	33.12	54.	6.76	33.69
22.	7.87	33.15	57.	6.70	33.73
23.	7.80	33.18	58.	6.68	33.73
24.	7.75	33.23	61.	6.67	33.74
26.	7.63	33.27	63.	6.66	33.74
28.	7.34	33.31	65.	6.66	33.75
29.	7.12	33.33	65.	6.66	33.76
29.	7.11	33.33	68.	6.60	33.77
30.	7.08	33.40	69.	6.59	33.77

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- 7- 2

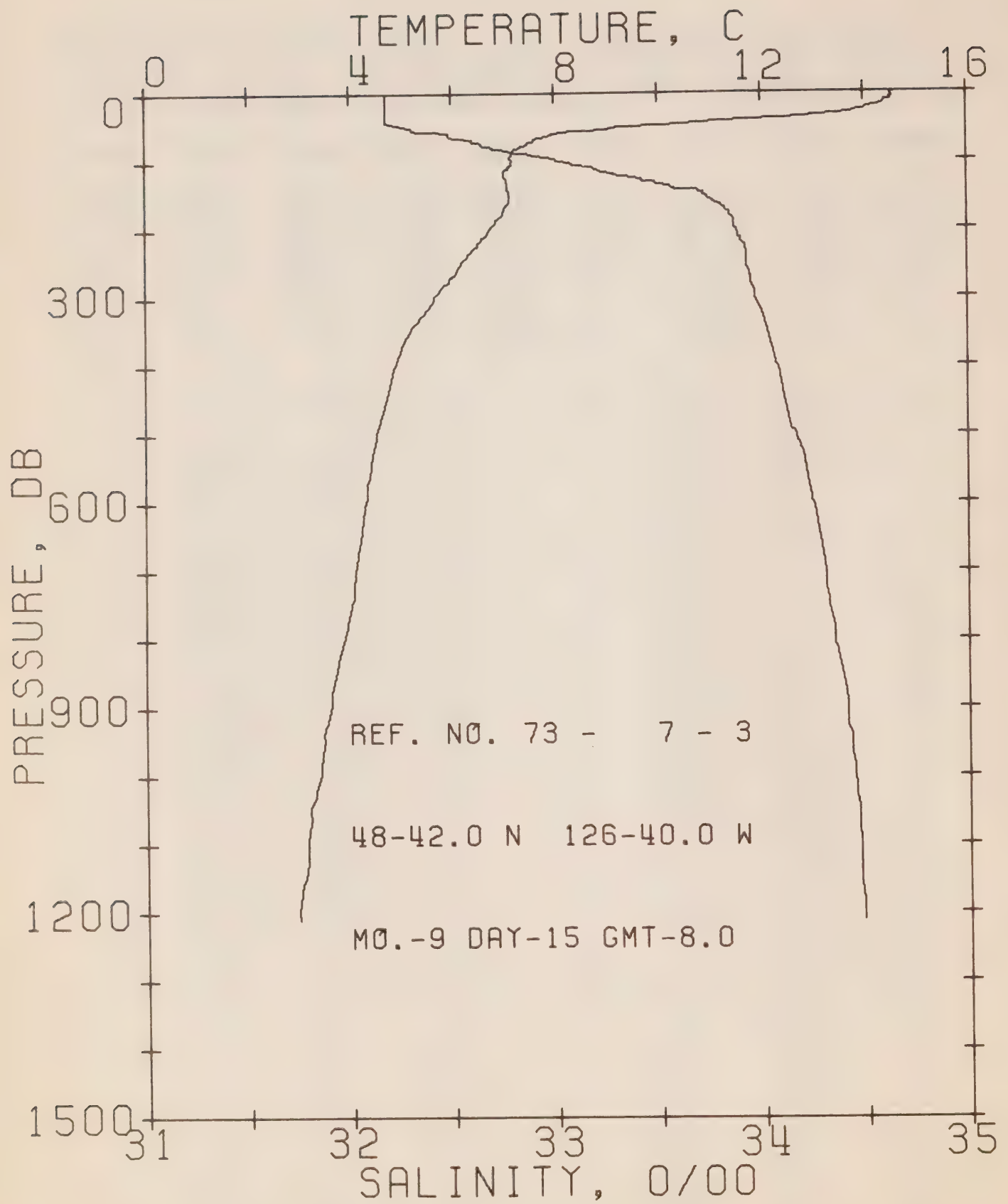
DATE 15/ 9/73

POSITION 48-38.0N, 126- 0.0W GMT 5.4

RESULTS OF STP CAST 74 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.60	32.35	0	24.63	331.8	0.0	0.0	1493.
10	10.92	32.37	10	24.77	319.2	0.33	0.02	1491.
20	8.88	32.50	20	25.21	277.3	0.63	0.06	1483.
30	7.82	32.92	30	25.69	231.5	0.88	0.13	1480.
50	7.36	33.23	50	26.00	202.5	1.31	0.30	1479.
75	6.84	33.51	75	26.29	175.0	1.78	0.60	1478.
100	6.47	33.83	99	26.59	146.9	2.17	0.95	1477.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	11.60	32.35	41.	7.53	33.12
1.	11.59	32.35	44.	7.49	33.16
2.	11.56	32.35	45.	7.42	33.19
3.	11.51	32.36	46.	7.40	33.22
4.	11.46	32.36	47.	7.40	33.22
5.	11.49	32.36	50.	7.36	33.23
6.	11.36	32.36	51.	7.35	33.24
7.	11.27	32.36	52.	7.34	33.26
8.	11.20	32.36	54.	7.28	33.30
9.	11.16	32.37	55.	7.27	33.30
10.	10.92	32.37	56.	7.26	33.31
11.	10.79	32.39	57.	7.25	33.34
13.	10.69	32.41	59.	7.19	33.35
13.	10.64	32.42	62.	7.15	33.37
14.	10.50	32.43	63.	7.14	33.38
14.	10.38	32.43	64.	7.09	33.38
15.	10.35	32.44	66.	7.08	33.40
16.	9.95	32.46	67.	7.03	33.42
18.	9.37	32.47	68.	6.93	33.43
19.	9.26	32.49	71.	6.86	33.44
21.	8.50	32.52	71.	6.86	33.44
22.	8.50	32.69	74.	6.85	33.50
23.	8.50	32.72	77.	6.83	33.54
24.	8.41	32.73	78.	6.83	33.56
25.	8.24	32.73	80.	6.82	33.57
26.	8.07	32.84	81.	6.79	33.58
27.	8.03	32.91	83.	6.75	33.63
28.	8.01	32.91	84.	6.73	33.67
30.	7.82	32.92	86.	6.65	33.71
31.	7.82	33.00	87.	6.65	33.72
32.	7.81	33.00	88.	6.64	33.74
34.	7.67	33.00	90.	6.62	33.77
36.	7.63	33.05	92.	6.52	33.80
37.	7.63	33.07	93.	6.51	33.82
38.	7.62	33.07	93.	6.50	33.82
39.	7.57	33.07	96.	6.49	33.82
39.	7.56	33.08	100.	6.47	33.83



OFFSHORE OCEANOGRAPHY GROUP

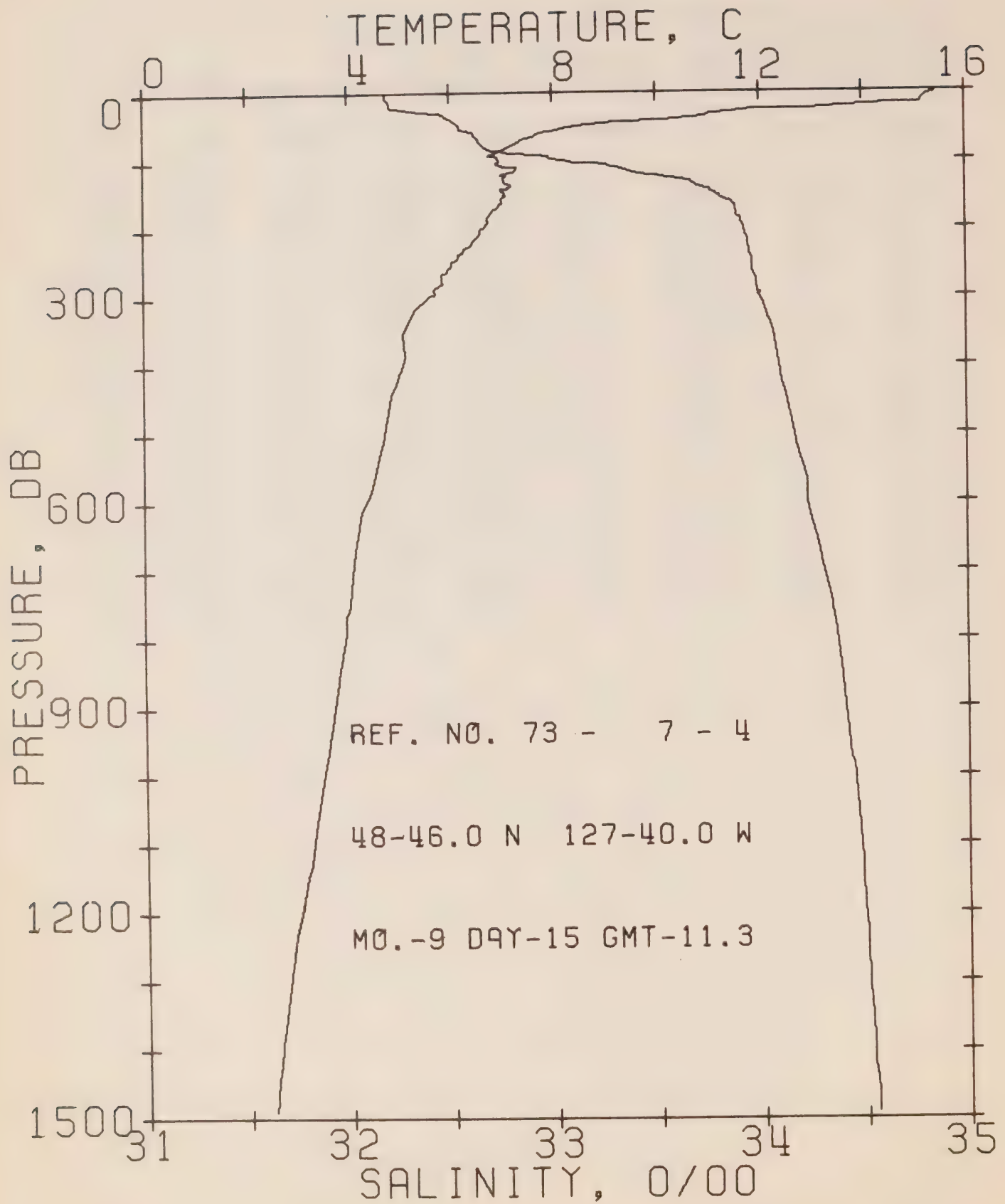
REFERENCE NO. 73- 7- 3

DATE 15/ 9/73

POSITION 48-42.0N, 126-40.0W GMT 8.0

RESULTS OF STP CAST 206 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	14.56	32.18	0	23.92	399.7	0.0	0.0	1503.
10	14.53	32.18	10	23.92	399.7	0.40	0.02	1503.
20	14.27	32.18	20	23.98	394.7	0.80	0.08	1502.
30	13.74	32.18	30	24.09	384.6	1.19	0.18	1500.
50	9.55	32.29	50	24.93	304.2	1.88	0.46	1486.
75	7.47	32.65	75	25.53	247.5	2.56	0.89	1479.
100	7.16	33.01	99	25.86	217.0	3.14	1.40	1479.
125	7.05	33.39	124	26.17	187.3	3.64	1.98	1479.
150	7.13	33.72	149	26.42	164.5	4.08	2.59	1480.
175	6.99	33.85	174	26.54	153.2	4.48	3.25	1480.
200	6.74	33.88	199	26.59	148.3	4.85	3.97	1480.
225	6.48	33.92	224	26.66	142.1	5.22	4.76	1479.
250	6.19	33.93	248	26.71	137.9	5.57	5.60	1478.
300	5.66	33.97	298	26.81	129.0	6.23	7.47	1477.
400	4.87	34.07	397	26.98	113.0	7.43	11.74	1476.
500	4.51	34.16	496	27.09	103.1	8.52	16.71	1476.
600	4.29	34.24	595	27.18	95.7	9.51	22.24	1477.
800	3.84	34.35	793	27.31	84.4	11.31	35.03	1478.
1000	3.37	34.44	991	27.43	73.8	12.87	49.33	1480.
1200	2.93	34.48	1188	27.50	67.3	14.27	64.99	1481.



OFFSHORE OCEANOGRAPHY GROUP

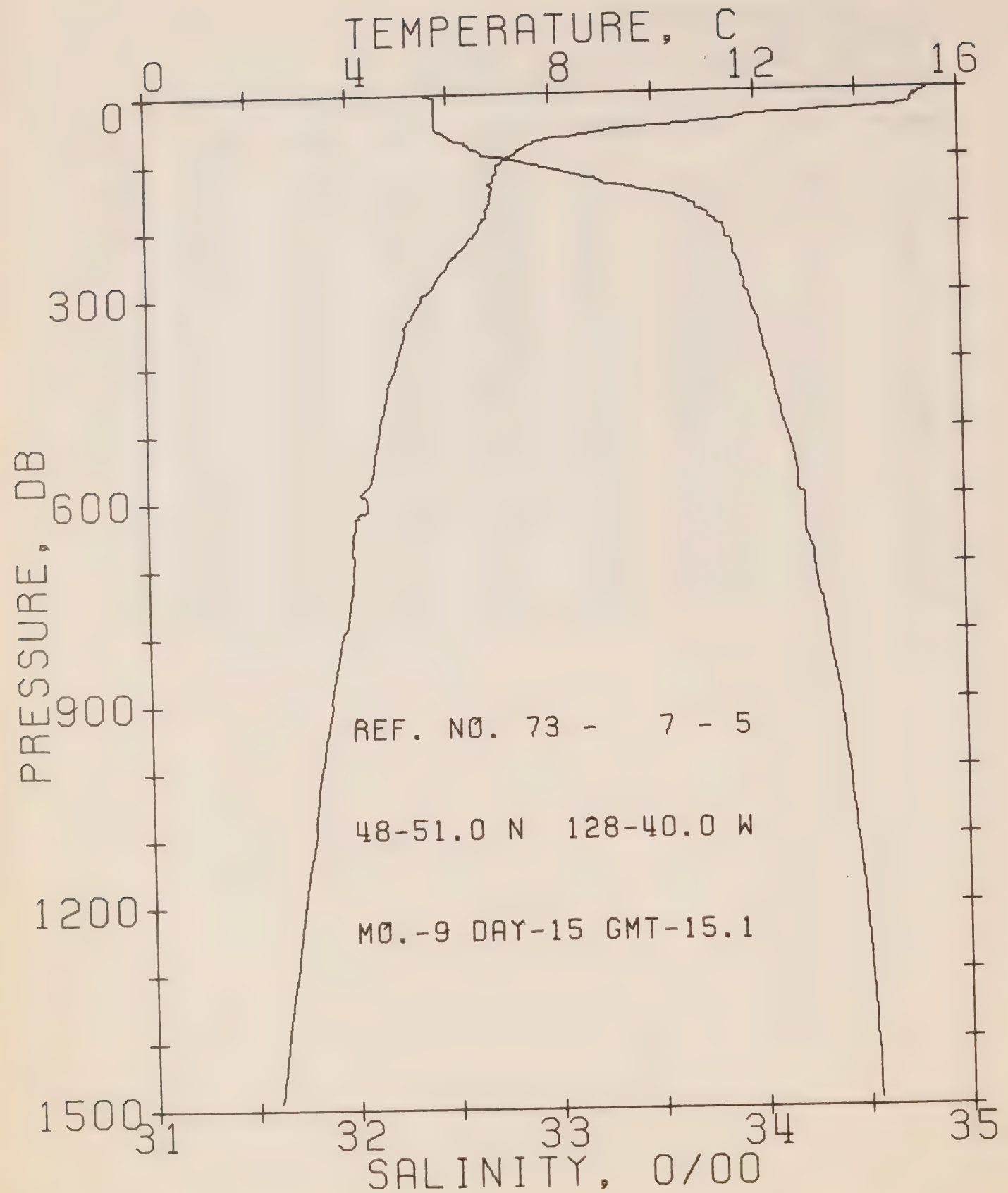
REFERENCE NO. 73- 7- 4

DATE 15/ 9/73

POSITION 48-46.0N, 127-40.0W GMT 11.3

RESULTS OF STP CAST 154 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	15.42	32.19	0	23.74	416.7	0.0	0.0	1505.
10	15.21	32.19	10	23.79	412.7	0.42	0.02	1505.
20	14.34	32.21	20	23.99	393.9	0.82	0.08	1502.
30	11.52	32.45	30	24.72	324.0	1.18	0.17	1493.
50	8.57	32.55	50	25.29	269.9	1.78	0.42	1483.
75	7.31	32.65	75	25.55	245.7	2.42	0.82	1478.
100	6.96	33.03	99	25.90	212.9	2.99	1.33	1478.
125	7.04	33.55	124	26.30	175.5	3.48	1.89	1479.
150	7.03	33.79	149	26.49	157.9	3.89	2.47	1480.
175	6.84	33.88	174	26.59	148.8	4.27	3.10	1480.
200	6.63	33.92	199	26.64	143.7	4.64	3.80	1479.
225	6.39	33.94	223	26.69	139.4	4.99	4.56	1479.
250	6.04	33.96	248	26.75	133.9	5.33	5.39	1478.
300	5.57	33.99	298	26.84	126.1	5.99	7.21	1477.
400	5.06	34.09	397	26.97	114.2	7.17	11.42	1477.
500	4.69	34.16	496	27.07	105.5	8.26	16.43	1477.
600	4.33	34.22	595	27.16	97.8	9.28	22.10	1477.
800	3.89	34.36	793	27.32	83.8	11.07	34.88	1479.
1000	3.46	34.45	991	27.42	74.4	12.66	49.37	1480.
1200	2.98	34.49	1188	27.51	66.9	14.07	65.19	1482.



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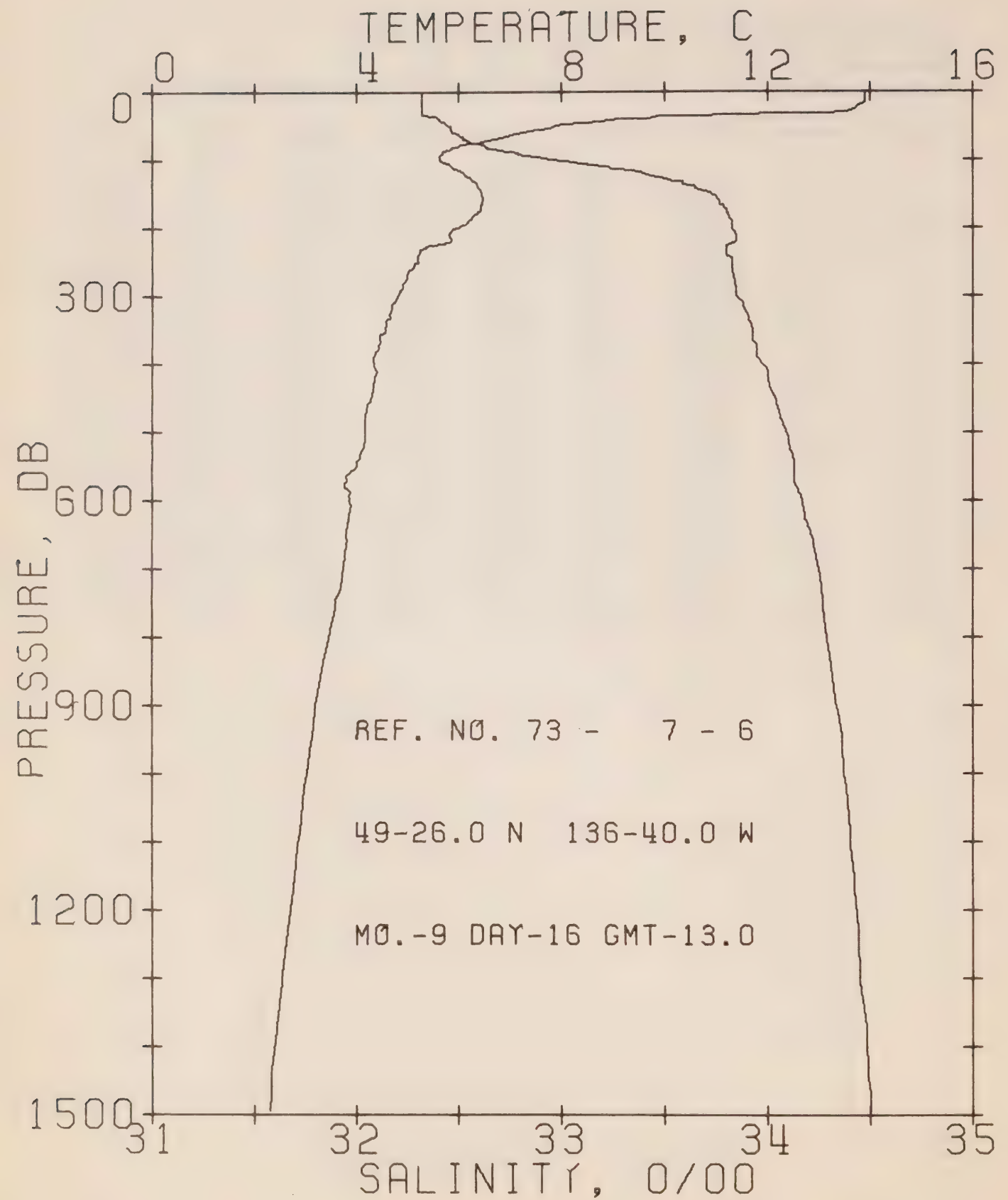
REFERENCE NO. 73- 7- 5

DATE 15/ 9/73

POSITION 48-51.0N, 128-40.0W GMT 15.1

RESULTS OF STP CAST 215 POINTS TAKEN FROM ANALOG TRACE

PRFSS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	15.38	32.39	0	23.90	401.2	0.0	0.0	1505.
10	15.20	32.44	10	23.98	394.2	0.40	0.02	1505.
20	15.08	32.44	20	24.01	392.0	0.79	0.08	1505.
30	13.67	32.44	30	24.30	364.1	1.17	0.18	1500.
50	10.13	32.44	50	24.96	301.9	1.83	0.45	1488.
75	7.65	32.59	75	25.46	254.5	2.52	0.88	1480.
100	7.08	32.86	99	25.75	227.1	3.13	1.42	1478.
125	6.87	33.18	124	26.03	200.9	3.67	2.04	1478.
150	6.85	33.54	149	26.31	174.1	4.14	2.70	1479.
175	6.74	33.73	174	26.48	158.9	4.55	3.38	1479.
200	6.58	33.84	199	26.59	149.0	4.94	4.12	1479.
225	6.31	33.88	224	26.65	142.9	5.31	4.91	1479.
250	5.98	33.90	248	26.71	137.3	5.66	5.76	1478.
300	5.47	33.96	298	26.82	127.7	6.32	7.62	1476.
400	4.92	34.05	397	26.95	115.4	7.53	11.92	1476.
500	4.57	34.13	496	27.06	106.2	8.63	16.98	1476.
600	4.33	34.22	595	27.16	97.8	9.65	22.70	1477.
800	3.79	34.32	793	27.29	86.0	11.49	35.78	1478.
1000	3.32	34.42	991	27.42	74.6	13.09	50.39	1480.
1200	2.94	34.49	1138	27.51	66.6	14.51	66.24	1481.



OFFSHORE OCEANOGRAPHY GROUP

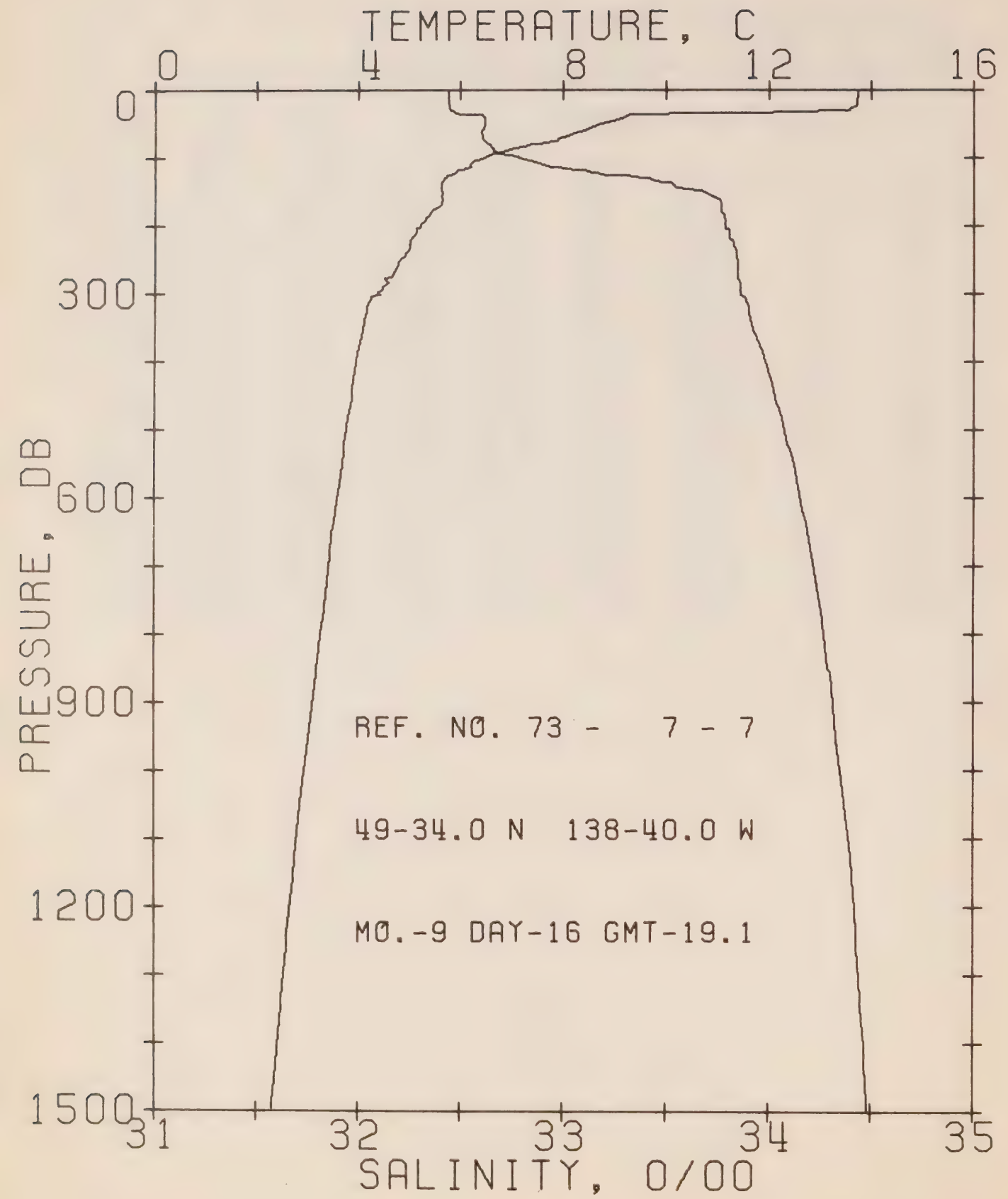
REFERENCE NO. 73- 7- 6

DATE 16/ 9/73

POSITION 49-26.0N, 136-40.0W GMT 13.0

RESULTS OF STP CAST 219 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	13.90	32.32	0	24.16	376.5	0.0	0.0	1501.
10	13.90	32.32	10	24.16	376.9	0.38	0.02	1501.
20	13.77	32.32	20	24.19	374.7	0.75	0.08	1500.
30	13.56	32.32	30	24.23	371.0	1.13	0.17	1500.
50	7.90	32.45	50	25.31	267.9	1.73	0.42	1480.
75	6.37	32.56	75	25.61	240.2	2.37	0.82	1475.
100	5.64	32.95	99	26.00	202.6	2.92	1.31	1473.
125	5.18	33.47	124	26.35	170.5	3.39	1.84	1475.
150	6.46	33.72	149	26.51	155.4	3.79	2.41	1478.
175	6.40	33.80	174	26.58	149.3	4.17	3.04	1478.
200	6.00	33.83	199	26.65	142.4	4.54	3.74	1477.
225	5.64	33.81	223	26.68	139.6	4.89	4.49	1475.
250	5.23	33.83	248	26.75	133.8	5.23	5.31	1474.
300	4.79	33.85	298	26.81	127.7	5.88	7.14	1474.
400	4.34	33.98	397	26.96	114.2	7.08	11.42	1473.
500	4.17	34.09	496	27.07	104.9	8.18	16.44	1474.
600	3.85	34.17	595	27.17	96.2	9.18	22.06	1475.
800	3.45	34.29	793	27.30	84.6	10.99	34.91	1477.
1000	3.02	34.37	990	27.41	75.1	12.57	49.40	1478.
1200	2.69	34.43	1188	27.48	68.1	14.00	65.41	1480.



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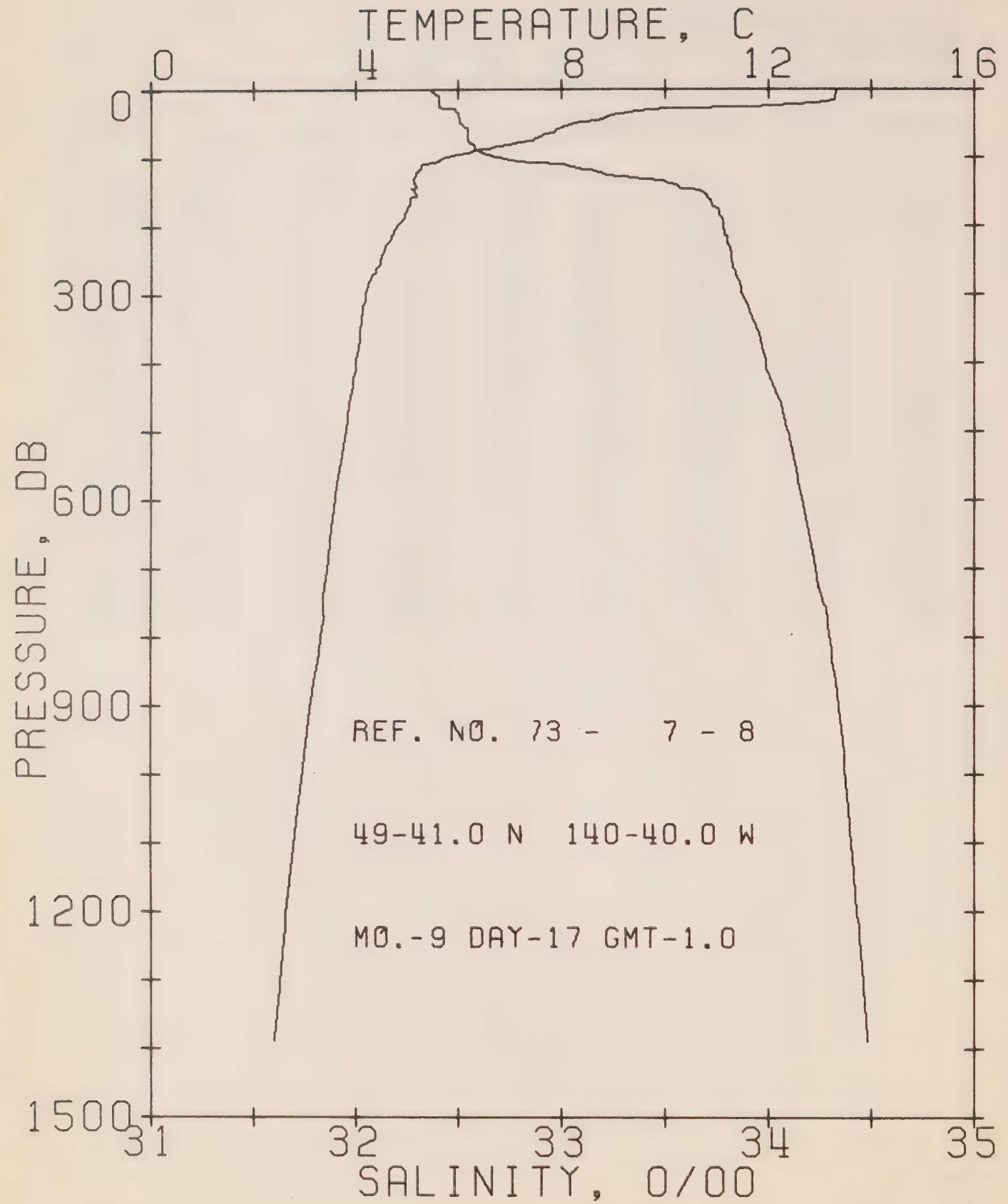
REFERENCE NO. 73- 7- 7

DATE 16/ 9/73

POSITION 49-34.0N, 138-40.0W GMT 19.1

RESULTS OF STP CAST 153 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	13.74	32.44	0	24.29	364.6	0.0	0.0	1500.
10	13.72	32.44	10	24.29	364.6	0.36	0.02	1500.
20	13.70	32.44	20	24.30	364.4	0.73	0.07	1500.
30	13.58	32.46	30	24.34	361.0	1.09	0.17	1500.
50	8.71	32.62	50	25.33	266.8	1.67	0.40	1483.
75	7.88	32.62	75	25.45	255.7	2.33	0.82	1481.
100	6.50	32.78	99	25.76	225.7	2.93	1.35	1476.
125	5.82	33.21	124	26.19	185.6	3.45	1.95	1474.
150	5.65	33.69	149	26.59	148.0	3.86	2.52	1474.
175	5.49	33.77	174	26.67	140.4	4.22	3.11	1474.
200	5.22	33.79	199	26.72	136.1	4.56	3.77	1474.
225	5.02	33.83	223	26.77	131.4	4.90	4.49	1473.
250	4.84	33.85	248	26.80	128.2	5.22	5.28	1473.
300	4.39	33.86	298	26.86	122.5	5.85	7.04	1472.
400	3.96	33.98	397	27.01	109.7	7.00	11.13	1472.
500	3.77	34.07	496	27.10	101.7	8.06	15.97	1473.
600	3.58	34.15	595	27.18	94.8	9.04	21.46	1474.
800	3.27	34.27	793	27.30	84.1	10.81	34.09	1476.
1000	2.94	34.35	990	27.40	75.7	12.41	48.69	1478.
1200	2.65	34.42	1188	27.48	68.6	13.84	64.76	1480.



OFFSHORE OCEANOGRAPHY GROUP

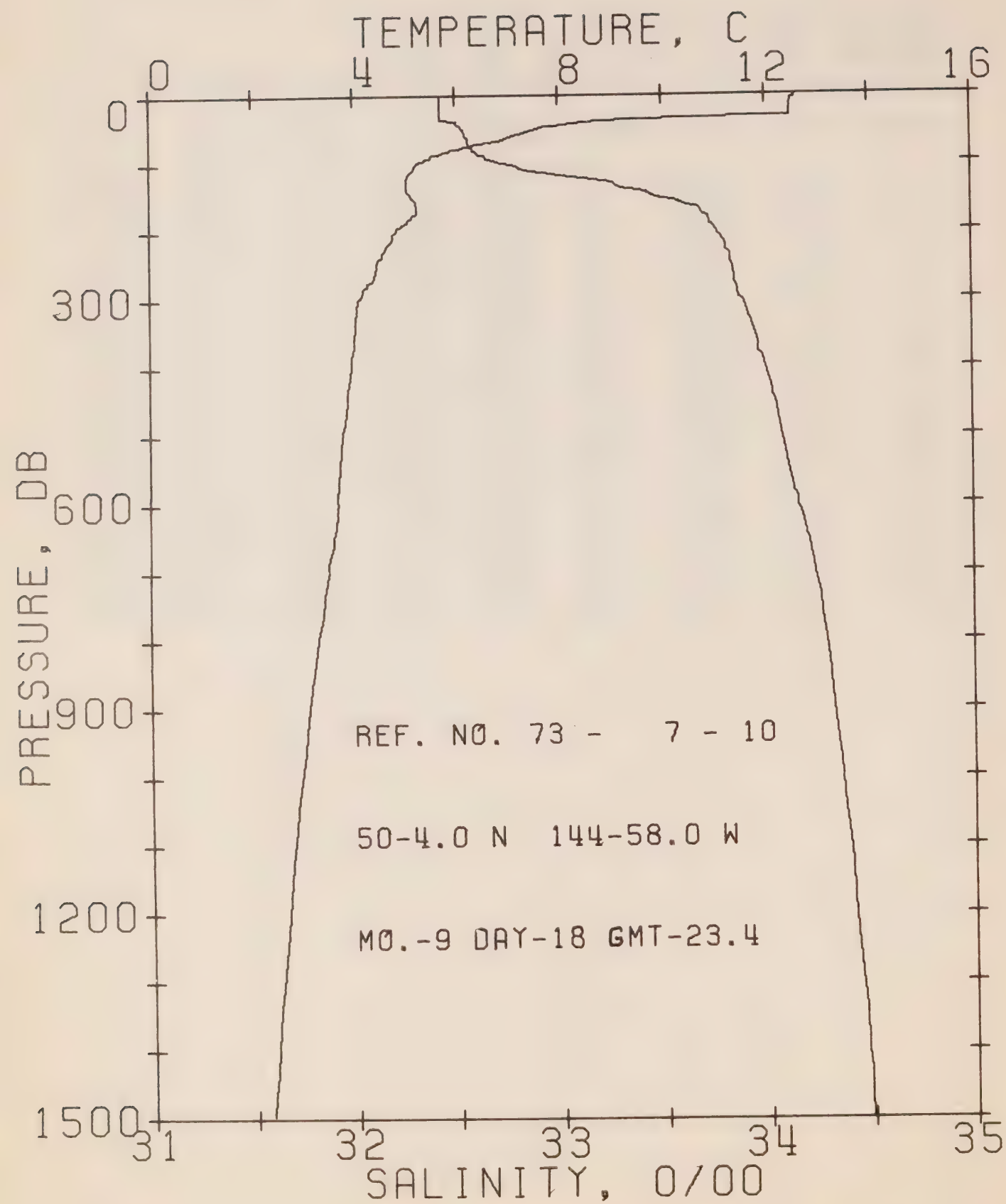
REFERENCE NO. 73- 7- 8

DATE 17/ 9/73

POSITION 49-41.0N, 140-40.0W GMT 1.0

RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE

PRFSS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	13.31	32.37	0	24.32	361.5	0.0	0.0	1499.
10	13.29	32.40	10	24.35	359.1	0.36	0.02	1499.
20	13.00	32.41	20	24.41	353.3	0.72	0.07	1498.
30	9.89	32.48	30	25.03	294.4	1.05	0.16	1487.
50	8.24	32.51	50	25.31	268.2	1.61	0.38	1481.
75	7.46	32.55	75	25.45	254.9	2.26	0.80	1479.
100	5.80	32.68	99	25.77	224.7	2.86	1.33	1473.
125	5.17	33.21	124	26.26	178.2	3.35	1.90	1471.
150	5.15	33.68	149	26.63	143.3	3.75	2.45	1472.
175	5.00	33.75	174	26.71	136.1	4.10	3.03	1472.
200	4.81	33.78	199	26.75	132.2	4.43	3.67	1472.
225	4.62	33.80	223	26.79	128.8	4.76	4.37	1472.
250	4.49	33.82	248	26.82	126.2	5.08	5.14	1471.
300	4.20	33.87	298	26.89	119.6	5.69	6.86	1471.
400	4.01	33.99	397	27.01	109.7	6.83	10.92	1472.
500	3.82	34.09	496	27.11	100.9	7.88	15.74	1473.
600	3.59	34.16	595	27.19	94.0	8.86	21.19	1474.
800	3.31	34.30	793	27.32	82.2	10.62	33.70	1476.
1000	2.94	34.37	990	27.42	74.0	12.17	47.91	1478.
1200	2.62	34.43	1188	27.49	67.5	13.58	63.72	1480.



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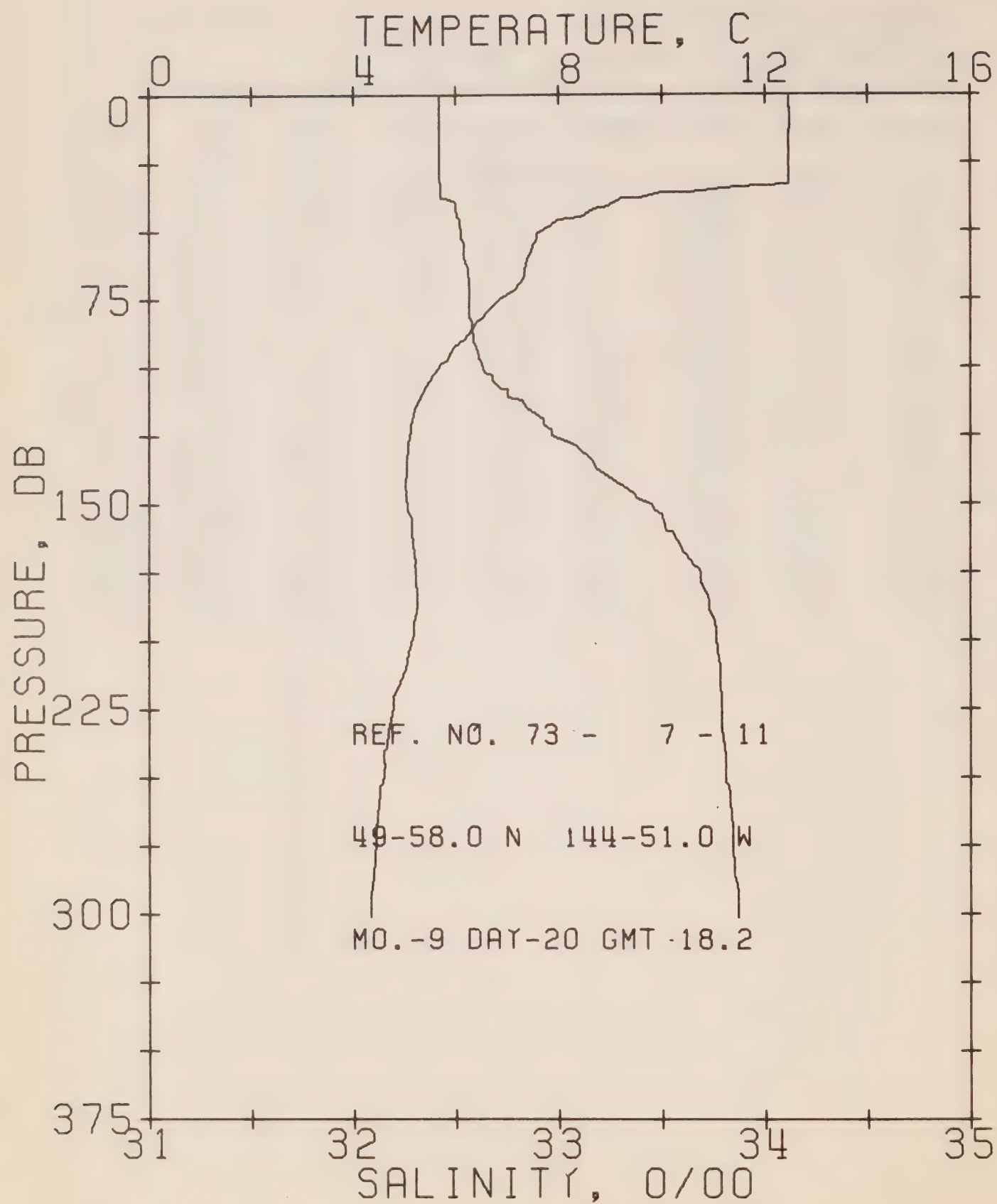
REFERENCE NO. 73- 7- 10

DATE 18/ 9/73

POSITION 50- 4.0N, 144-58.0W GMT 23.4

RESULTS OF STP CAST 173 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.59	32.43	0	24.51	343.6	0.0	0.0	1496.
10	12.50	32.43	10	24.53	342.4	0.34	0.02	1496.
20	12.48	32.43	20	24.53	342.2	0.69	0.07	1496.
30	12.47	32.43	30	24.53	342.4	1.03	0.16	1496.
50	7.63	32.53	50	25.42	257.9	1.60	0.39	1479.
75	6.32	32.57	75	25.62	238.8	2.22	0.78	1474.
100	5.29	32.72	99	25.86	215.9	2.79	1.29	1471.
125	5.04	33.18	124	26.25	179.2	3.29	1.86	1471.
150	5.15	33.49	149	26.49	157.2	3.71	2.45	1472.
175	5.21	33.70	174	26.65	142.4	4.08	3.06	1473.
200	4.82	33.76	199	26.74	133.8	4.43	3.72	1472.
225	4.62	33.81	223	26.80	128.1	4.75	4.43	1472.
250	4.45	33.83	248	26.84	124.7	5.07	5.19	1471.
300	4.11	33.88	298	26.91	118.1	5.68	6.90	1471.
400	3.93	34.00	397	27.02	108.4	6.81	10.92	1472.
500	3.76	34.07	496	27.10	101.6	7.86	15.72	1473.
600	3.68	34.15	595	27.17	95.8	8.85	21.26	1474.
800	3.25	34.28	793	27.31	82.8	10.62	33.88	1476.
1000	2.91	34.36	990	27.40	74.9	12.20	48.34	1478.
1200	2.64	34.41	1188	27.47	68.8	13.63	64.37	1480.



OFFSHORE OCEANOGRAPHY GROUP

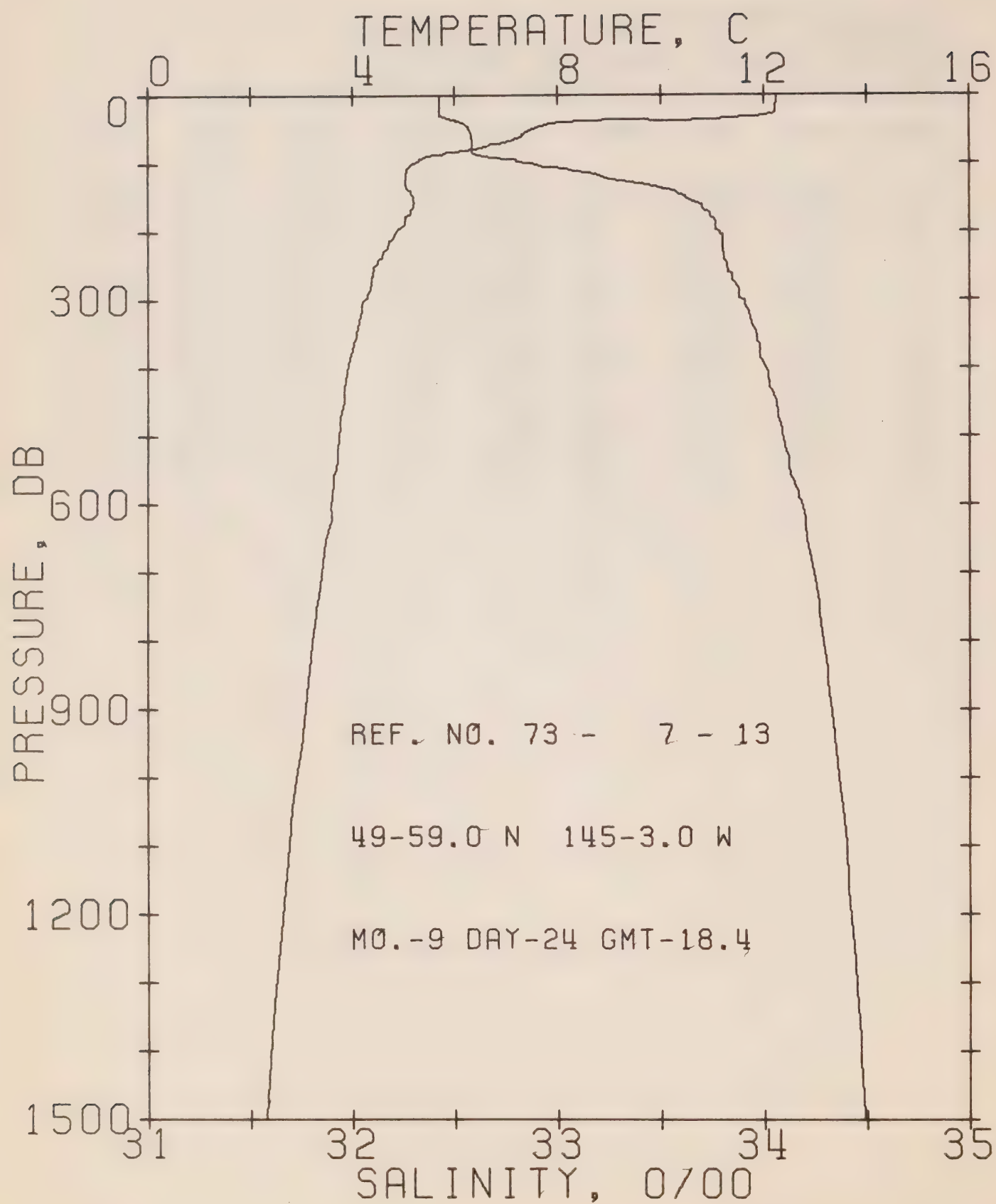
REFERENCE NO. 73- 7- 11

DATE 20/ 9/73

POSITION 49-58.0N, 144-51.0W GMT 18.2

RESULTS OF STP CAST 115 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.46	32.42	0	24.52	341.9	0.0	0.0	1496.
10	12.48	32.42	10	24.52	342.7	0.34	0.02	1496.
20	12.46	32.42	20	24.52	342.6	0.69	0.07	1496.
30	12.45	32.42	30	24.53	342.6	1.03	0.16	1496.
50	7.66	32.53	50	25.41	259.0	1.61	0.39	1479.
75	6.95	32.57	75	25.55	245.4	2.24	0.79	1476.
100	5.66	32.63	99	25.75	226.6	2.84	1.32	1472.
125	5.09	32.97	124	26.08	195.2	3.36	1.92	1471.
150	5.06	33.45	149	26.47	159.1	3.80	2.54	1472.
175	5.22	33.68	174	26.63	143.7	4.18	3.17	1473.
200	5.14	33.76	199	26.70	137.2	4.53	3.84	1473.
225	4.77	33.79	223	26.77	131.3	4.87	4.56	1472.
250	4.57	33.81	248	26.81	127.8	5.19	5.34	1472.
300	4.31	33.87	298	26.88	121.0	5.81	7.08	1472.



OFFSHORE OCEANOGRAPHY GROUP

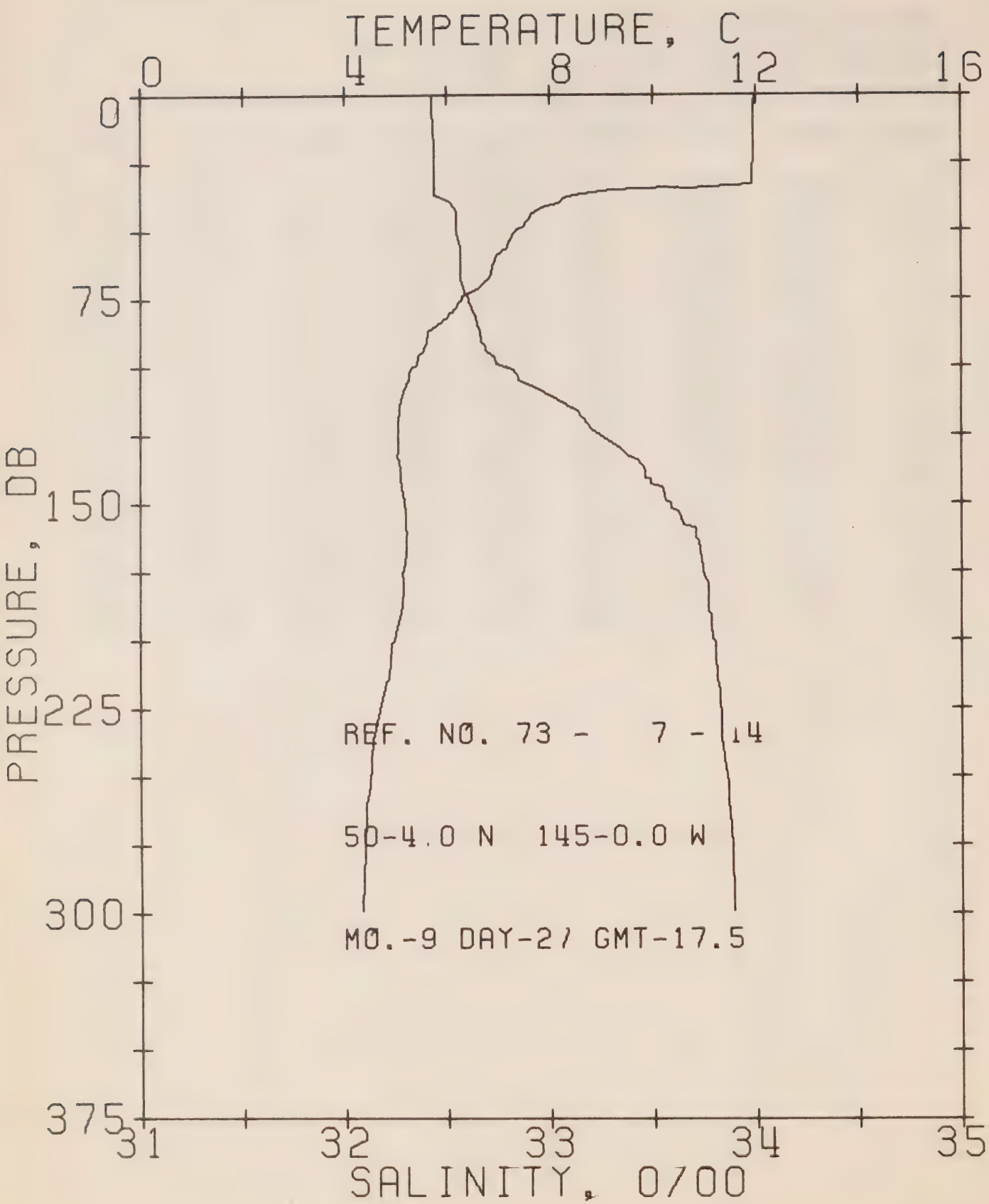
REFERENCE NO. 73- 7- 13

DATE 24/ 9/73

POSITION 49-59.0N, 145- 3.0W GMT 18.4

RESULTS OF STP CAST 167 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.23	32.43	0	24.58	337.1	0.0	0.0	1495.
10	12.23	32.43	10	24.58	337.5	0.34	0.02	1495.
20	12.22	32.43	20	24.58	337.6	0.67	0.07	1495.
30	12.08	32.43	30	24.60	335.3	1.01	0.15	1495.
50	7.54	32.57	50	25.46	254.1	1.53	0.38	1479.
75	6.65	32.59	75	25.59	241.4	2.20	0.78	1476.
100	5.21	32.87	99	25.99	203.8	2.77	1.28	1471.
125	5.03	33.31	124	26.36	169.1	3.23	1.81	1471.
150	5.21	33.62	149	26.58	148.1	3.62	2.36	1472.
175	5.13	33.74	174	26.69	138.5	3.98	2.95	1473.
200	4.86	33.78	199	26.75	132.5	4.32	3.60	1472.
225	4.68	33.80	223	26.79	129.5	4.65	4.31	1472.
250	4.46	33.82	248	26.82	125.9	4.97	5.08	1471.
300	4.27	33.89	298	26.90	118.7	5.58	6.79	1471.
400	3.91	34.01	397	27.03	107.2	6.70	10.79	1472.
500	3.73	34.09	496	27.12	99.8	7.73	15.52	1473.
600	3.58	34.18	595	27.20	92.3	8.70	20.92	1474.
800	3.21	34.29	793	27.32	81.9	10.44	33.30	1476.
1000	2.88	34.36	990	27.41	74.2	12.00	47.60	1478.
1200	2.62	34.42	1188	27.48	68.3	13.42	63.47	1480.



OFFSHORE OCEANOGRAPHY GROUP

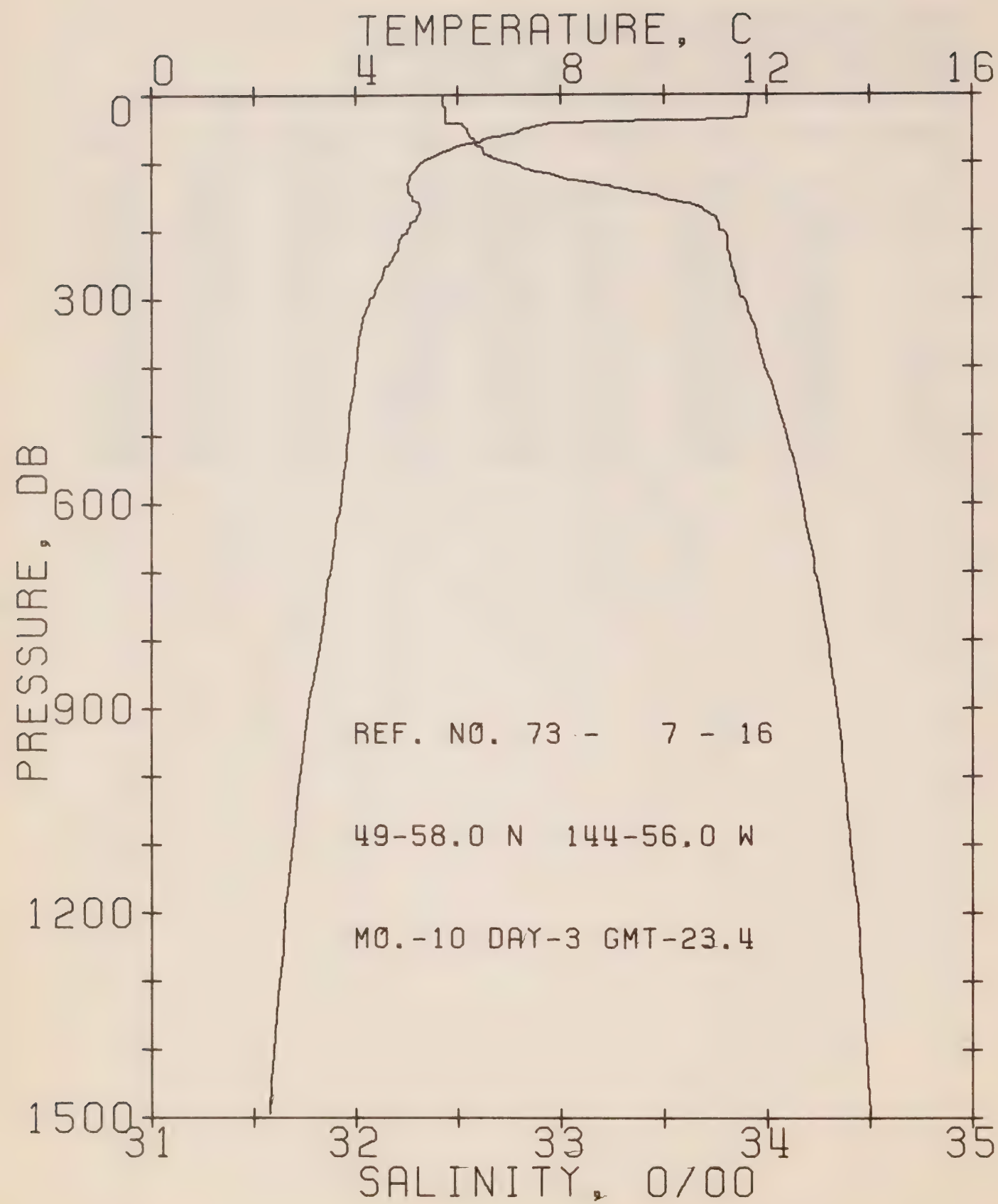
REFERENCE NO. 73- 7- 14

DATE 27/ 9/73

POSITION 50- 4.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 105 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.97	32.43	0	24.62	332.5	0.0	0.0	1494.
10	11.94	32.43	10	24.63	332.1	0.33	0.02	1494.
20	11.94	32.44	20	24.64	331.9	0.66	0.07	1494.
30	11.92	32.44	30	24.64	331.7	1.00	0.15	1494.
50	7.33	32.55	50	25.47	252.8	1.55	0.38	1478.
75	6.28	32.60	75	25.65	235.8	2.17	0.77	1474.
100	5.35	32.78	99	25.90	212.1	2.73	1.27	1471.
125	5.03	33.24	124	26.30	174.3	3.21	1.81	1471.
150	5.18	33.59	149	26.56	150.1	3.61	2.37	1472.
175	5.13	33.74	174	26.69	138.5	3.97	2.96	1473.
200	4.96	33.79	199	26.75	133.1	4.31	3.61	1472.
225	4.67	33.82	223	26.81	127.6	4.63	4.32	1472.
250	4.49	33.85	248	26.85	123.7	4.94	5.08	1471.



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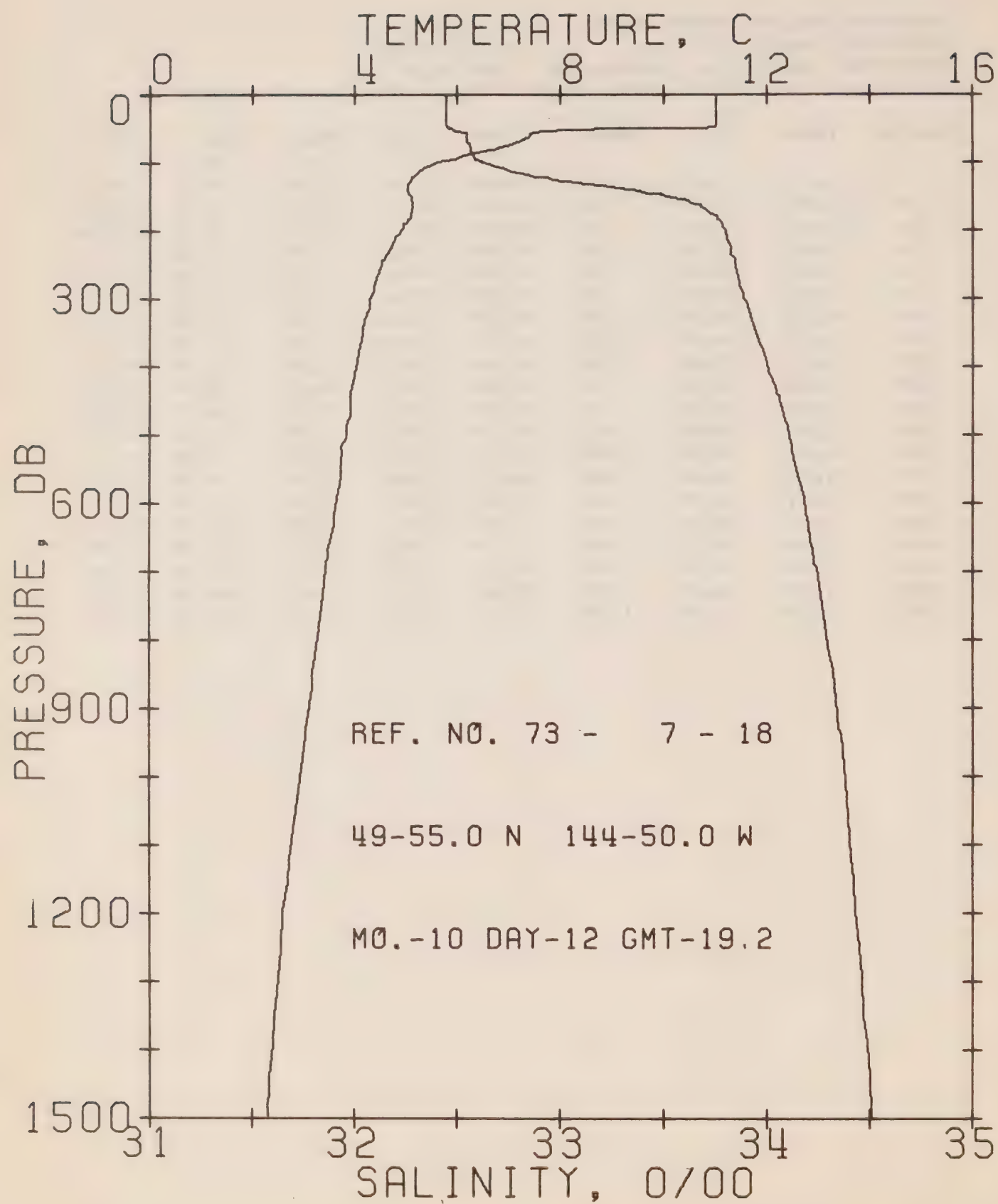
REFERENCE NO. 73- 7- 16

DATE 3/10/73

POSITION 49-58.0N. 144-56.0W GMT 23.4

RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.65	32.43	0	24.68	326.8	0.0	0.0	1493.
10	11.64	32.43	10	24.69	327.1	0.33	0.02	1493.
20	11.62	32.44	20	24.70	326.2	0.65	0.07	1493.
30	11.61	32.44	30	24.70	326.2	0.98	0.15	1493.
50	7.35	32.54	50	25.46	253.8	1.56	0.38	1478.
75	6.01	32.61	75	25.69	232.2	2.17	0.77	1473.
100	5.32	32.74	99	25.88	214.6	2.73	1.27	1471.
125	5.05	33.05	124	26.15	188.8	3.24	1.85	1471.
150	5.10	33.47	149	26.48	158.1	3.67	2.46	1472.
175	5.23	33.72	174	26.66	141.2	4.05	3.07	1473.
200	5.02	33.77	199	26.72	135.3	4.39	3.73	1473.
225	4.83	33.81	223	26.78	130.4	4.72	4.44	1472.
250	4.63	33.83	248	26.81	127.2	5.04	5.22	1472.
300	4.27	33.89	298	26.90	119.0	5.66	6.95	1471.
400	4.01	33.99	397	27.01	109.7	6.80	11.00	1472.
500	3.84	34.09	496	27.11	101.1	7.85	15.82	1473.
600	3.69	34.17	595	27.18	94.4	8.82	21.28	1474.
800	3.29	34.29	793	27.32	82.4	10.59	33.84	1476.
1000	2.88	34.37	990	27.42	73.4	12.14	48.05	1478.
1200	2.59	34.44	1188	27.50	66.3	13.54	63.70	1480.



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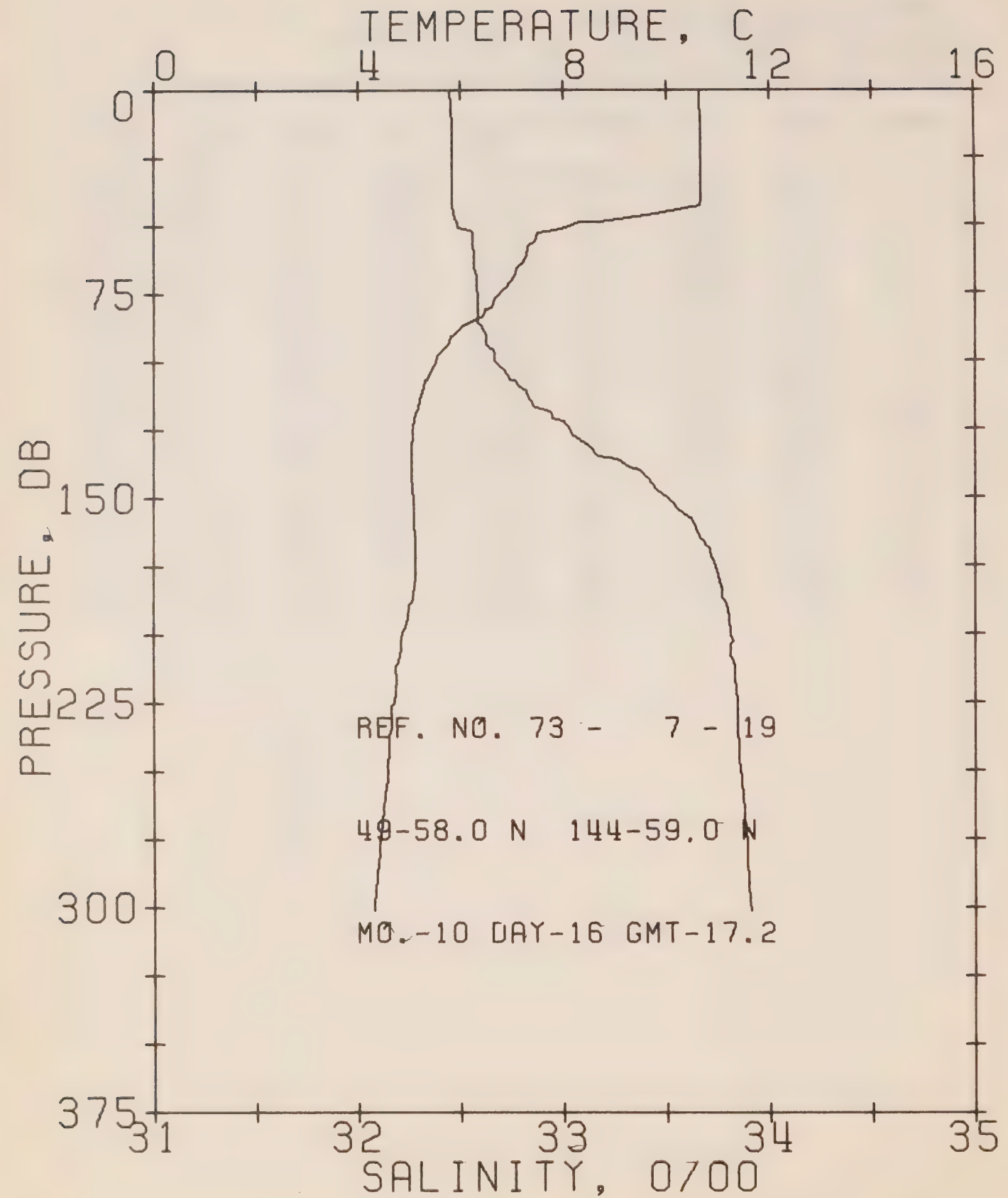
REFERENCE NO. 73- 7- 18

DATE 12/10/73

POSITION 49-55.0N, 144-50.0W GMT 19.2

RESULTS OF STP CAST 148 POINTS TAKEN FROM ANALOG TRACE

PRFSS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.02	32.45	0	24.81	314.6	0.0	0.0	1491.
10	11.02	32.45	10	24.81	314.9	0.31	0.02	1491.
20	11.02	32.45	20	24.81	315.1	0.63	0.06	1491.
30	11.01	32.45	30	24.81	315.3	0.95	0.14	1491.
50	10.70	32.46	50	24.88	309.7	1.58	0.40	1490.
75	7.00	32.56	75	25.52	248.2	2.22	0.81	1477.
100	5.69	32.62	99	25.74	227.9	2.81	1.34	1472.
125	5.10	32.96	124	26.07	196.0	3.35	1.95	1471.
150	5.11	33.52	149	26.51	154.7	3.78	2.55	1472.
175	5.09	33.73	174	26.68	138.8	4.14	3.15	1473.
200	4.91	33.80	199	26.76	131.8	4.48	3.80	1472.
225	4.72	33.83	223	26.80	127.9	4.80	4.50	1472.
250	4.53	33.85	248	26.84	124.4	5.12	5.27	1472.
300	4.30	33.89	298	26.90	119.3	5.73	6.97	1472.
400	4.03	34.00	397	27.02	108.8	6.87	11.03	1472.
500	3.84	34.11	496	27.12	99.8	7.91	15.79	1473.
600	3.64	34.18	595	27.20	92.9	8.87	21.19	1474.
800	3.26	34.29	793	27.32	82.3	10.62	33.62	1476.
1000	2.94	34.38	990	27.42	73.5	12.17	47.84	1478.
1200	2.60	34.43	1188	27.49	67.1	13.58	63.57	1480.



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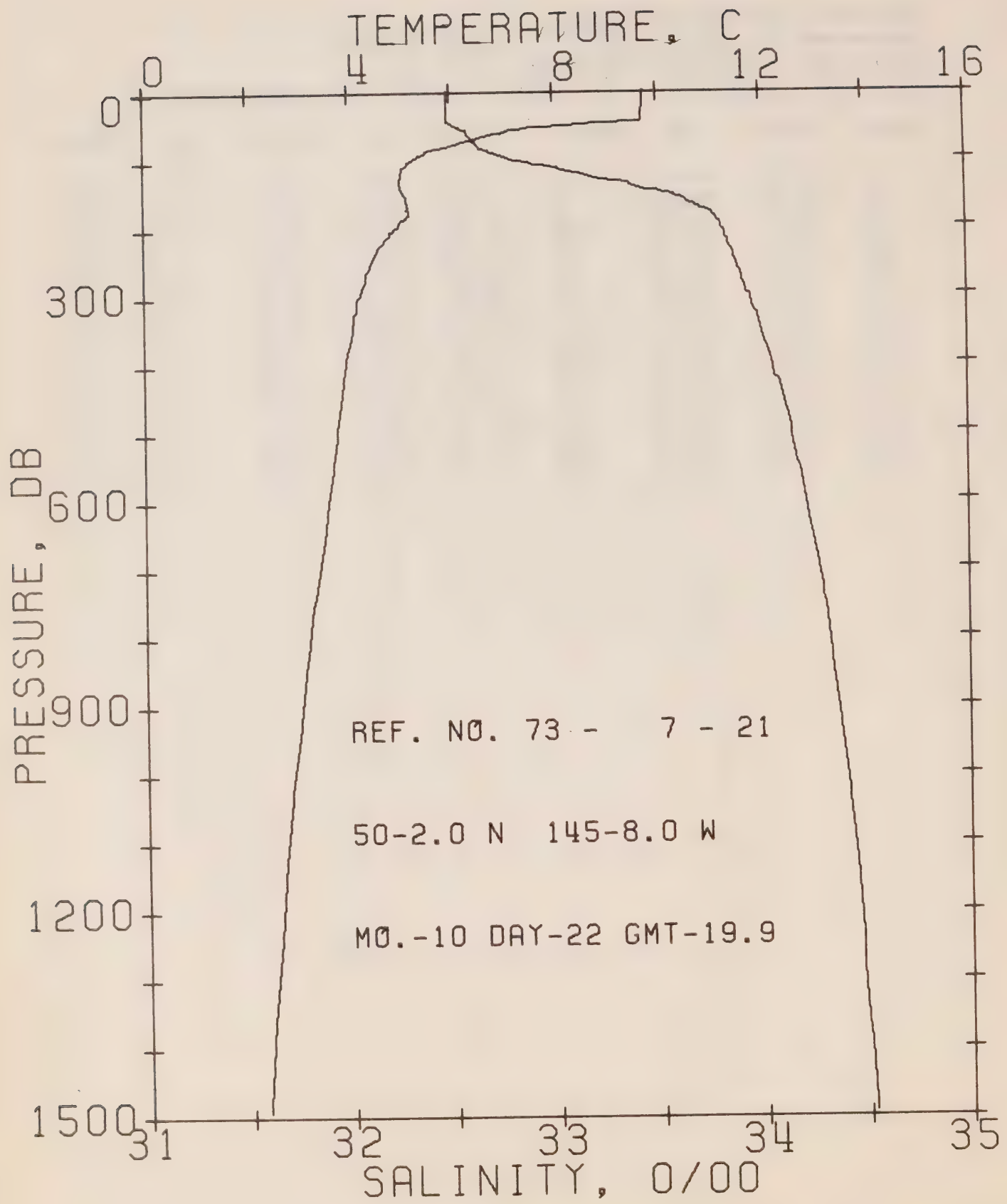
REFERENCE NO. 73- 7- 19

DATE 16/10/73

POSITION 49-58.0N, 144-59.0W GMT 17.2

RESULTS OF STP CAST 97 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.65	32.45	0	24.88	308.4	0.0	0.0	1489.
10	10.66	32.46	10	24.88	308.4	0.31	0.02	1490.
20	10.66	32.46	20	24.88	308.5	0.62	0.06	1490.
30	10.67	32.46	30	24.88	308.8	0.93	0.14	1490.
50	8.17	32.49	50	25.30	268.7	1.53	0.39	1481.
75	6.76	32.58	75	25.57	243.3	2.16	0.79	1476.
100	5.53	32.67	99	25.79	222.4	2.74	1.30	1472.
125	5.07	33.03	124	26.13	190.7	3.26	1.90	1471.
150	5.09	33.50	149	26.50	155.7	3.69	2.50	1472.
175	5.12	33.73	174	26.68	139.0	4.05	3.10	1473.
200	4.86	33.81	199	26.77	130.6	4.39	3.74	1472.
225	4.68	33.84	223	26.82	126.5	4.71	4.44	1472.
250	4.55	33.86	248	26.84	124.3	5.02	5.20	1472.
300	4.30	33.90	298	26.91	118.2	5.63	6.89	1472.



OFFSHORE OCEANOGRAPHY GROUP

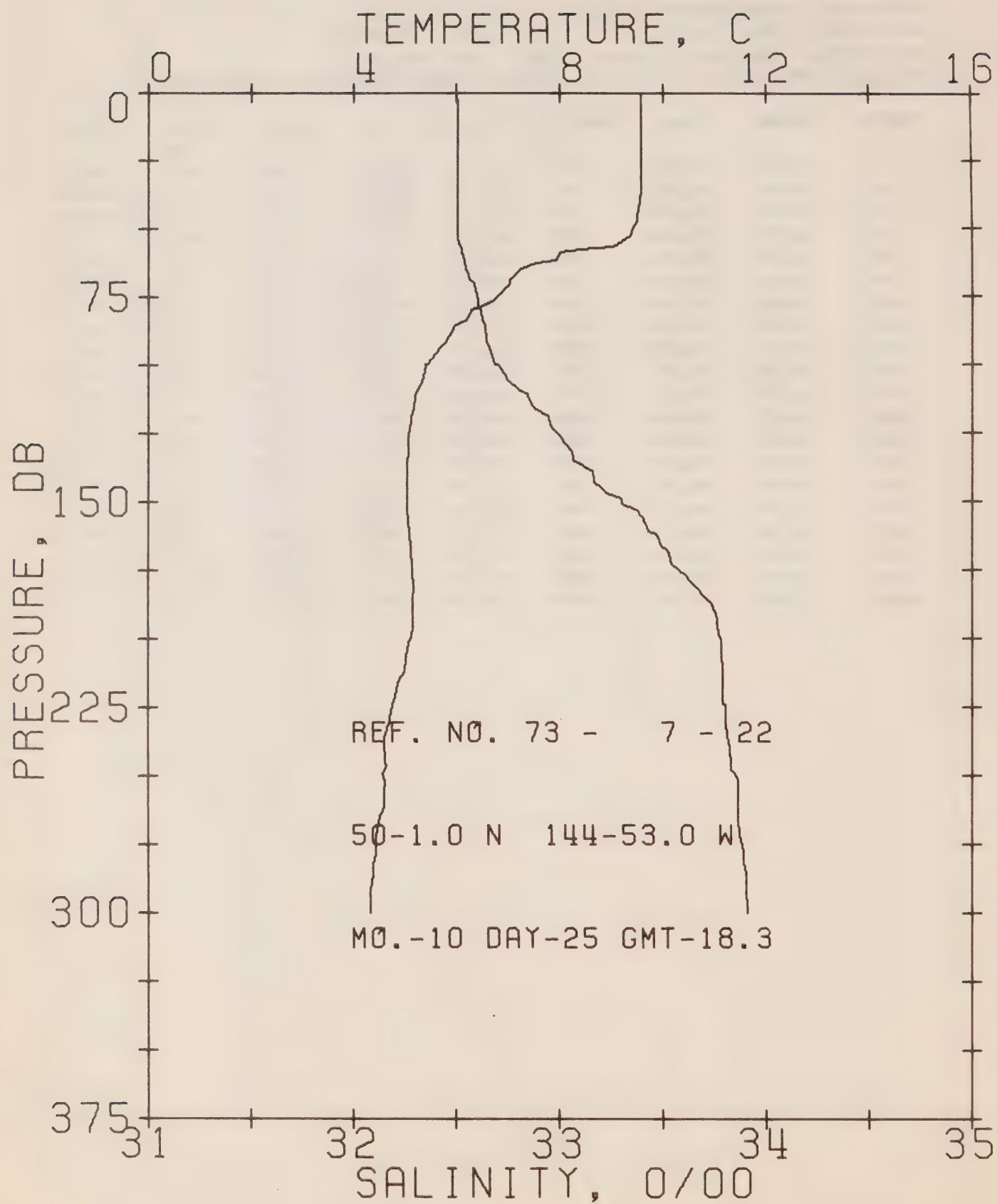
REFERENCE NO. 73- 7- 21

DATE 22/10/73

POSITION 50- 2.0N, 145- 8.0W GMT 19.9

RESULTS OF STP CAST 134 PCINTS TAKEN FROM ANALCG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.77	32.49	0	25.06	291.3	0.0	0.0	1486.
10	9.72	32.49	10	25.06	290.9	0.29	0.01	1486.
20	9.72	32.49	20	25.07	291.1	0.58	0.06	1486.
30	9.71	32.49	30	25.07	291.2	0.87	0.13	1487.
50	8.67	32.51	50	25.25	274.1	1.45	0.37	1483.
75	6.32	32.61	75	25.65	235.6	2.07	0.76	1474.
100	5.33	32.78	99	25.91	211.8	2.64	1.26	1471.
125	5.03	33.16	124	26.24	180.3	3.13	1.82	1471.
150	5.07	33.50	149	26.51	155.3	3.55	2.41	1472.
175	5.16	33.71	174	26.66	141.1	3.91	3.02	1473.
200	4.98	33.81	199	26.76	132.1	4.25	3.67	1473.
225	4.67	33.84	223	26.82	126.4	4.58	4.37	1472.
250	4.49	33.87	248	26.86	122.2	4.89	5.12	1471.
300	4.23	33.94	298	26.94	115.1	5.48	6.78	1471.
400	3.94	34.05	397	27.06	104.4	6.57	10.68	1472.
500	3.77	34.14	496	27.15	96.7	7.58	15.27	1473.
600	3.58	34.21	595	27.22	90.5	8.52	20.52	1474.
800	3.18	34.32	793	27.35	79.3	10.21	32.56	1476.
1000	2.85	34.40	990	27.44	71.2	11.72	46.35	1478.
1200	2.60	34.46	1188	27.52	65.0	13.07	61.54	1480.



OFFSHORE OCEANOGRAPHY GROUP

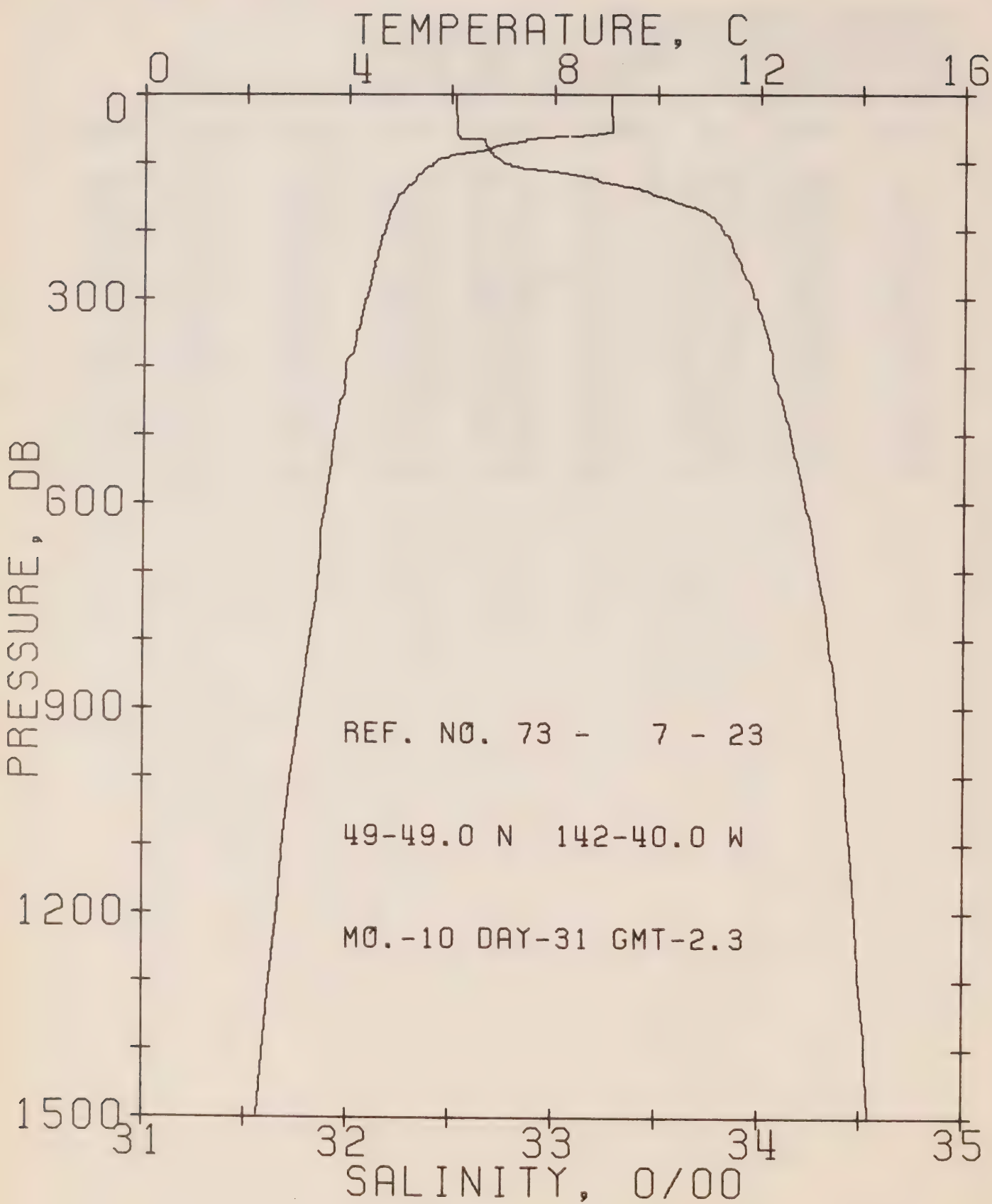
REFERENCE NO. 73- 7- 22

DATE 25/10/73

POSITION 50- 1.0N, 144-53.0W GMT 18.3

RESULTS OF STP CAST 95 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.58	32.50	0	25.09	287.7	0.0	0.0	1486.
10	9.58	32.51	10	25.10	287.3	0.29	0.01	1486.
20	9.58	32.51	20	25.10	287.5	0.57	0.06	1486.
30	9.57	32.51	30	25.10	287.6	0.86	0.13	1486.
50	9.41	32.51	50	25.13	285.5	1.44	0.37	1486.
75	6.80	32.60	75	25.58	242.3	2.09	0.78	1476.
100	5.45	32.69	99	25.82	219.9	2.67	1.29	1471.
125	5.08	32.99	124	26.10	193.8	3.18	1.88	1471.
150	5.05	33.30	149	26.35	170.3	3.64	2.52	1471.
175	5.15	33.57	174	26.55	151.1	4.04	3.18	1473.
200	5.09	33.77	199	26.72	135.7	4.39	3.85	1473.
225	4.74	33.80	223	26.78	130.2	4.72	4.58	1472.
250	4.59	33.85	248	26.83	125.3	5.04	5.35	1472.
300	4.31	33.91	298	26.91	118.0	5.65	7.05	1472.



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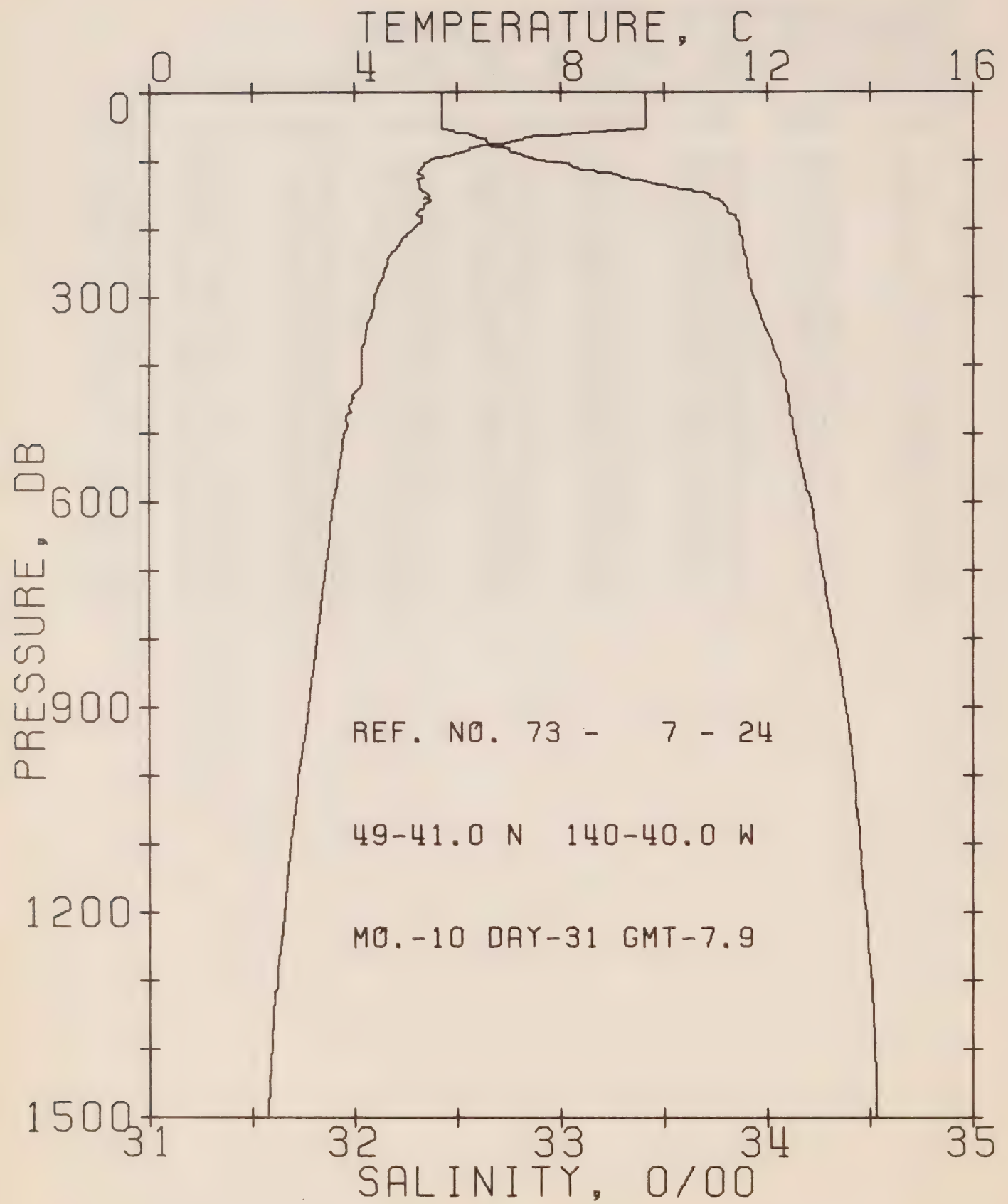
REFERENCE NO. 73- 7- 23

DATE 31/10/73

POSITION 49-49.0N, 142-40.0W GMT 2.3

RESULTS OF STP CAST 127 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.10	32.52	0	25.19	278.9	0.0	0.0	1484.
10	9.10	32.52	10	25.19	279.3	0.28	0.01	1484.
20	9.10	32.52	20	25.19	279.3	0.56	0.06	1484.
30	9.10	32.52	30	25.19	279.4	0.84	0.13	1484.
50	9.11	32.53	50	25.19	279.4	1.40	0.36	1485.
75	7.01	32.66	75	25.60	240.4	2.06	0.77	1477.
100	5.70	32.74	99	25.83	218.8	2.63	1.28	1472.
125	5.30	33.21	124	26.25	179.6	3.13	1.86	1472.
150	4.95	33.50	149	26.52	154.4	3.55	2.44	1471.
175	4.80	33.74	174	26.72	135.0	3.91	3.03	1471.
200	4.70	33.82	199	26.80	128.0	4.23	3.66	1471.
225	4.59	33.86	223	26.85	123.8	4.55	4.34	1471.
250	4.52	33.90	248	26.89	120.2	4.85	5.08	1472.
300	4.35	33.98	298	26.96	113.4	5.44	6.72	1472.
400	3.96	34.06	397	27.07	103.9	6.52	10.57	1472.
500	3.74	34.15	496	27.16	95.6	7.52	15.14	1473.
600	3.57	34.22	595	27.24	89.3	8.44	20.32	1474.
800	3.26	34.34	793	27.36	78.7	10.12	32.22	1476.
1000	2.88	34.42	990	27.46	69.9	11.60	45.78	1478.
1200	2.62	34.47	1188	27.52	64.3	12.94	60.84	1480.



OFFSHORE OCEANOGRAPHY GROUP

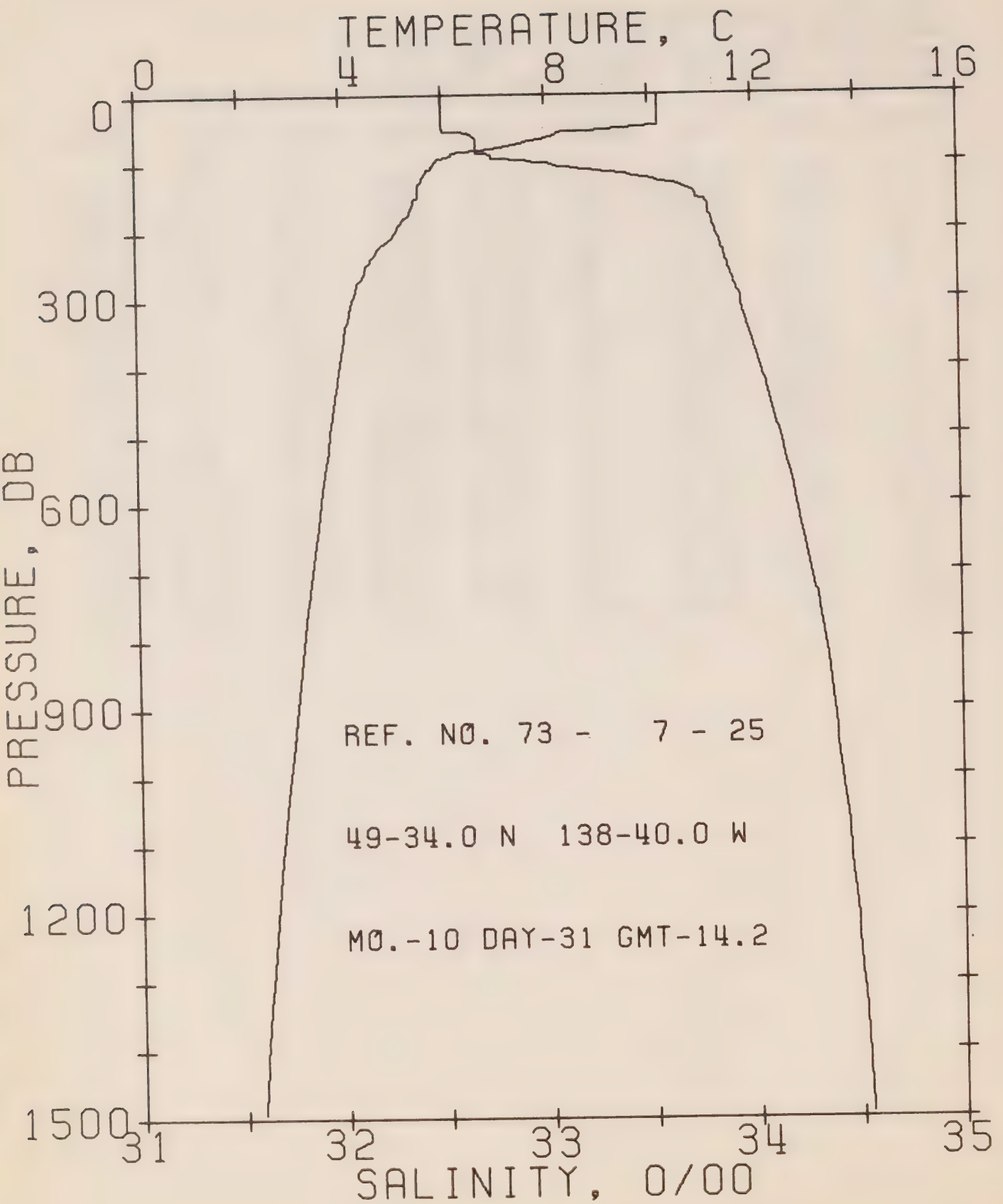
REFERENCE NO. 73- 7- 24

DATE 31/10/73

POSITION 49-41.0N, 140-40.0W GMT 7.9

RESULTS OF STP CAST 201 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.65	32.42	0	25.02	294.7	0.0	0.0	1486.
10	9.64	32.43	10	25.03	294.2	0.29	0.01	1486.
20	9.65	32.43	20	25.03	294.6	0.59	0.06	1486.
30	9.65	32.43	30	25.03	294.7	0.88	0.14	1486.
50	9.65	32.43	50	25.03	295.1	1.47	0.38	1487.
75	6.88	32.65	75	25.61	239.8	2.14	0.80	1477.
100	5.47	32.90	99	25.98	204.5	2.69	1.29	1472.
125	5.37	33.31	124	26.32	172.9	3.16	1.82	1472.
150	5.44	33.72	149	26.63	143.3	3.55	2.37	1474.
175	5.22	33.81	174	26.73	134.3	3.90	2.94	1473.
200	5.14	33.87	199	26.78	129.6	4.23	3.57	1473.
225	4.85	33.88	223	26.83	125.4	4.54	4.26	1473.
250	4.65	33.90	248	26.87	122.0	4.85	5.01	1472.
300	4.38	33.93	298	26.92	117.1	5.45	6.68	1472.
400	4.14	34.06	397	27.05	105.6	6.56	10.64	1473.
500	3.79	34.13	496	27.14	97.6	7.58	15.29	1473.
600	3.59	34.21	595	27.22	90.5	8.52	20.58	1474.
800	3.25	34.32	793	27.35	79.6	10.23	32.69	1476.
1000	2.89	34.42	990	27.46	70.1	11.72	46.34	1478.
1200	2.62	34.48	1188	27.53	63.9	13.06	61.35	1480.



OFFSHORE OCEANOGRAPHY GROUP

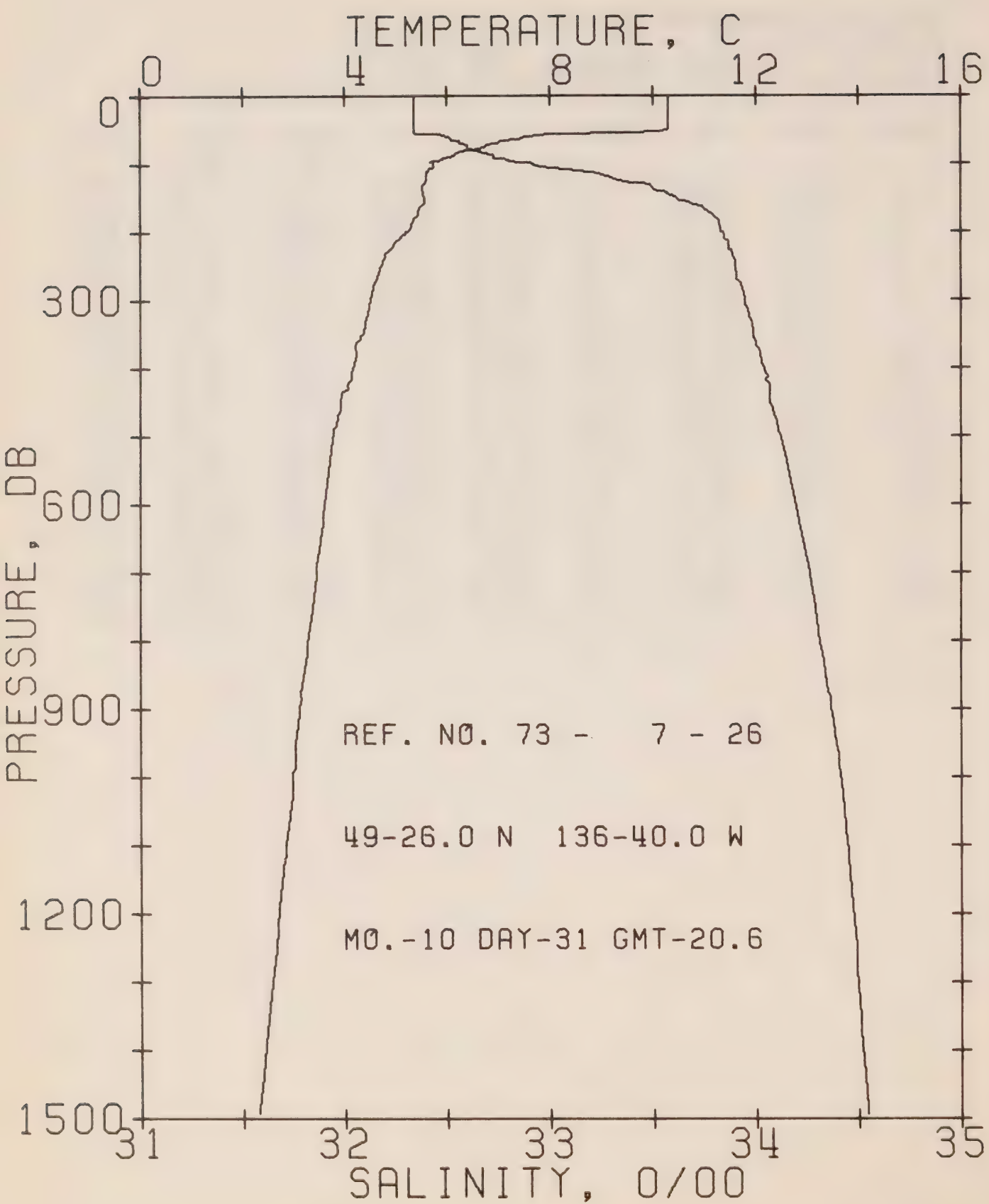
REFERENCE NO. 73- 7- 25

DATE 31/10/73

POSITION 49-34.0N, 138-40.0W GMT 14.2

RESULTS OF STP CAST 134 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.18	32.50	0	25.00	297.1	0.0	0.0	1488.
10	10.18	32.50	10	25.00	297.6	0.30	0.02	1488.
20	10.18	32.50	20	25.00	297.8	0.60	0.06	1488.
30	10.19	32.50	30	24.99	297.9	0.89	0.14	1488.
50	9.55	32.50	50	25.10	288.3	1.49	0.38	1486.
75	7.25	32.67	75	25.58	243.2	2.13	0.79	1478.
100	5.84	32.96	99	25.99	204.2	2.70	1.29	1473.
125	5.59	33.53	124	26.47	158.7	3.15	1.81	1474.
150	5.51	33.73	149	26.63	143.3	3.53	2.33	1474.
175	5.34	33.79	174	26.70	137.1	3.87	2.90	1474.
200	5.09	33.82	199	26.75	132.5	4.21	3.55	1473.
225	4.73	33.85	223	26.82	126.4	4.53	4.25	1472.
250	4.51	33.88	248	26.87	122.0	4.84	5.00	1472.
300	4.23	33.94	298	26.94	114.9	5.44	6.66	1471.
400	3.95	34.03	397	27.05	105.7	6.54	10.59	1472.
500	3.76	34.12	496	27.14	97.8	7.56	15.25	1473.
600	3.57	34.20	595	27.22	90.8	8.50	20.52	1474.
800	3.22	34.34	793	27.36	78.4	10.19	32.53	1476.
1000	2.91	34.41	990	27.45	71.0	11.68	46.19	1478.
1200	2.62	34.48	1188	27.53	64.0	13.03	61.26	1480.



OFFSHORE OCEANOGRAPHY GROUP

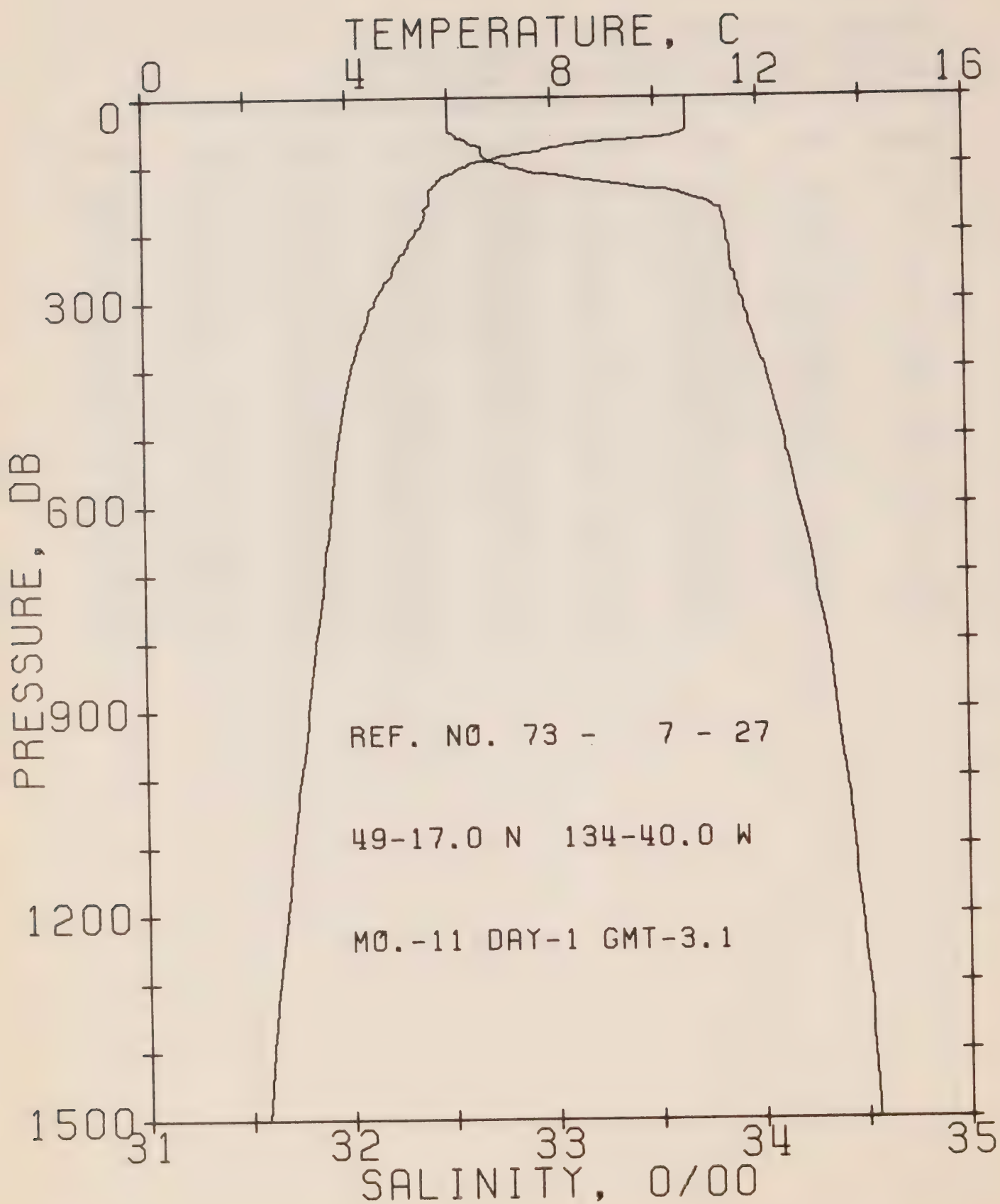
REFERENCE NO. 73- 7- 26

DATE 31/10/73

POSITION 49-26.0N, 136-40.0W GMT 20.6

RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.28	32.34	0	24.85	310.5	0.0	0.0	1488.
10	10.28	32.34	10	24.85	311.0	0.31	0.02	1488.
20	10.28	32.34	20	24.85	311.2	0.62	0.06	1488.
30	10.29	32.34	30	24.85	311.5	0.93	0.14	1489.
50	10.27	32.34	50	24.86	311.5	1.56	0.40	1489.
75	6.74	32.60	75	25.59	241.8	2.22	0.82	1476.
100	5.73	32.91	99	25.96	206.7	2.79	1.32	1473.
125	5.58	33.35	124	26.33	172.3	3.25	1.85	1473.
150	5.56	33.61	149	26.54	152.6	3.65	2.41	1474.
175	5.42	33.79	174	26.69	137.9	4.02	3.01	1474.
200	5.22	33.83	199	26.75	133.1	4.35	3.66	1474.
225	4.90	33.87	223	26.82	126.7	4.68	4.36	1473.
250	4.72	33.90	248	26.86	122.7	4.99	5.11	1472.
300	4.52	33.95	298	26.92	117.2	5.59	6.79	1473.
400	4.17	34.04	397	27.03	107.8	6.71	10.80	1473.
500	3.78	34.12	496	27.13	98.5	7.74	15.51	1473.
600	3.59	34.19	595	27.21	91.9	8.69	20.83	1474.
800	3.27	34.31	793	27.33	81.1	10.41	33.07	1476.
1000	2.97	34.41	990	27.44	71.4	11.93	46.96	1478.
1200	2.69	34.47	1188	27.52	65.1	13.30	62.25	1480.



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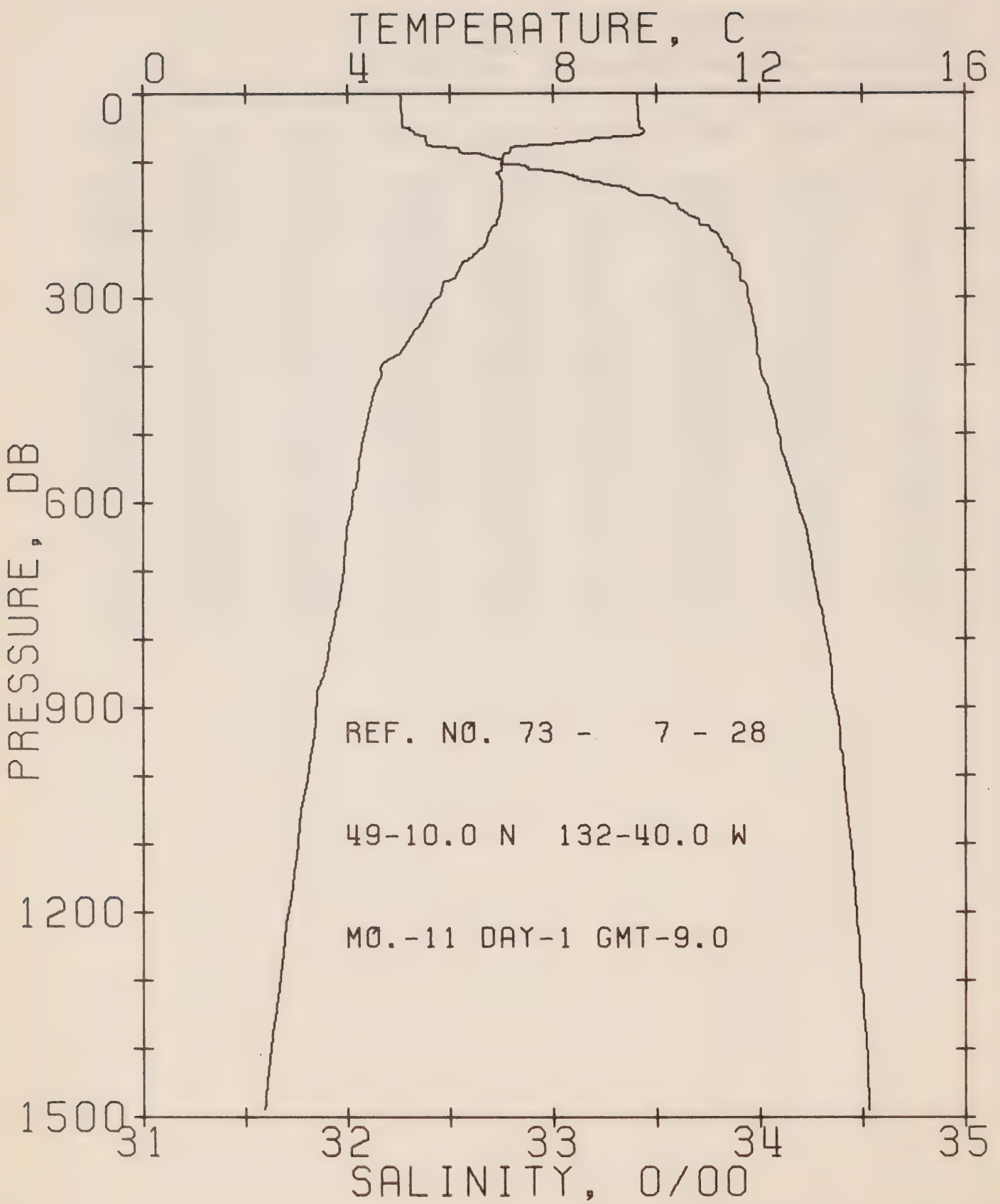
REFERENCE NO. 73- 7- 27

DATE 1/11/73

POSITION 49-17.0N, 134-40.0W GMT 3.1

RESULTS OF STP CAST 155 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.60	32.50	0	24.92	303.9	0.0	0.0	1489.
10	10.60	32.50	10	24.92	304.3	0.30	0.02	1490.
20	10.60	32.50	20	24.92	304.5	0.61	0.06	1490.
30	10.60	32.50	30	24.92	304.8	0.91	0.14	1490.
50	10.59	32.50	50	24.93	304.9	1.52	0.39	1490.
75	8.00	32.66	75	25.46	254.1	2.23	0.83	1481.
100	6.41	32.78	99	25.77	224.6	2.83	1.37	1475.
125	5.76	33.24	124	26.22	182.7	3.35	1.96	1474.
150	5.62	33.69	149	26.59	148.0	3.75	2.52	1474.
175	5.53	33.83	174	26.71	136.6	4.10	3.10	1474.
200	5.35	33.85	199	26.75	133.4	4.44	3.75	1474.
225	5.14	33.86	223	26.78	130.2	4.77	4.46	1474.
250	4.91	33.87	248	26.81	127.2	5.09	5.24	1473.
300	4.53	33.92	298	26.90	119.6	5.71	6.97	1473.
400	4.06	34.03	397	27.03	107.5	6.84	11.01	1472.
500	3.80	34.11	496	27.13	99.0	7.87	15.74	1473.
600	3.65	34.18	595	27.20	93.1	8.83	21.11	1474.
800	3.32	34.32	793	27.34	80.8	10.57	33.44	1476.
1000	2.99	34.41	990	27.44	72.1	12.10	47.47	1478.
1200	2.70	34.47	1188	27.52	65.0	13.47	62.79	1480.



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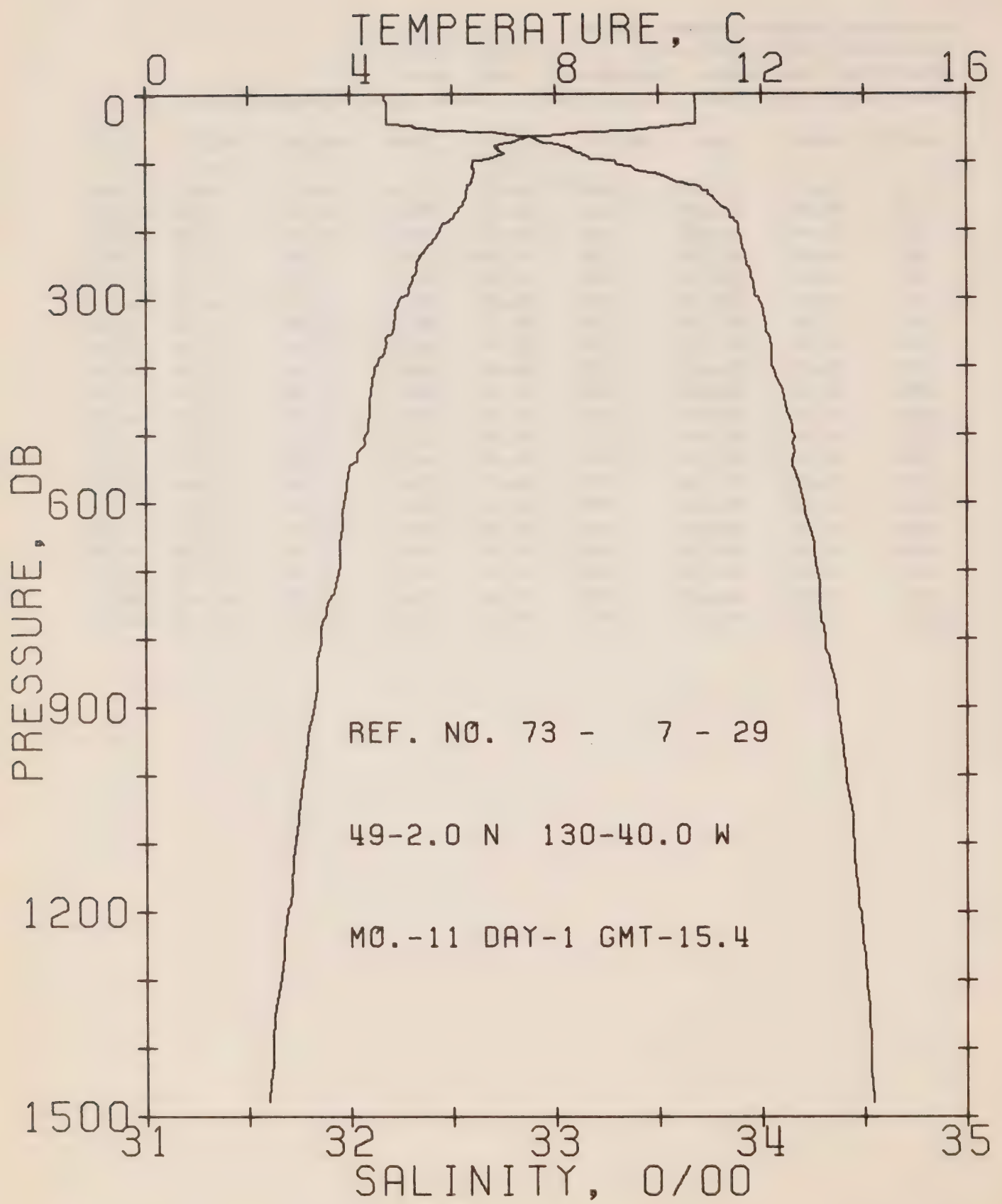
REFERENCE NO. 73- 7- 28

DATE 1/11/73

POSITION 49-10.0N, 132-40.0W GMT 9.0

RESULTS OF STP CAST 189 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.64	32.25	0	24.89	307.1	0.0	0.0	1486.
10	9.64	32.26	10	24.90	306.8	0.31	0.02	1486.
20	9.65	32.26	20	24.90	307.2	0.61	0.06	1486.
30	9.66	32.26	30	24.90	307.2	0.92	0.14	1486.
50	9.67	32.27	50	24.90	307.3	1.54	0.39	1486.
75	7.94	32.39	75	25.26	273.3	2.27	0.86	1481.
100	7.00	32.75	99	25.67	234.2	2.89	1.41	1478.
125	6.98	33.12	124	25.97	206.8	3.44	2.04	1479.
150	7.01	33.42	149	26.20	185.2	3.93	2.72	1479.
175	6.96	33.64	174	26.38	168.5	4.36	3.44	1480.
200	6.80	33.76	199	26.50	157.6	4.77	4.22	1480.
225	6.66	33.83	223	26.57	151.2	5.15	5.05	1480.
250	6.23	33.90	248	26.68	140.7	5.52	5.93	1479.
300	5.75	33.94	298	26.77	132.1	6.20	7.84	1478.
400	4.66	34.00	397	26.95	116.1	7.45	12.27	1475.
500	4.31	34.09	496	27.06	106.2	8.56	17.36	1475.
600	4.08	34.18	595	27.15	98.0	9.58	23.08	1476.
800	3.64	34.33	793	27.31	83.9	11.40	36.00	1478.
1000	3.22	34.41	991	27.42	74.5	12.97	50.43	1479.
1200	2.82	34.47	1188	27.50	66.9	14.38	66.21	1481.



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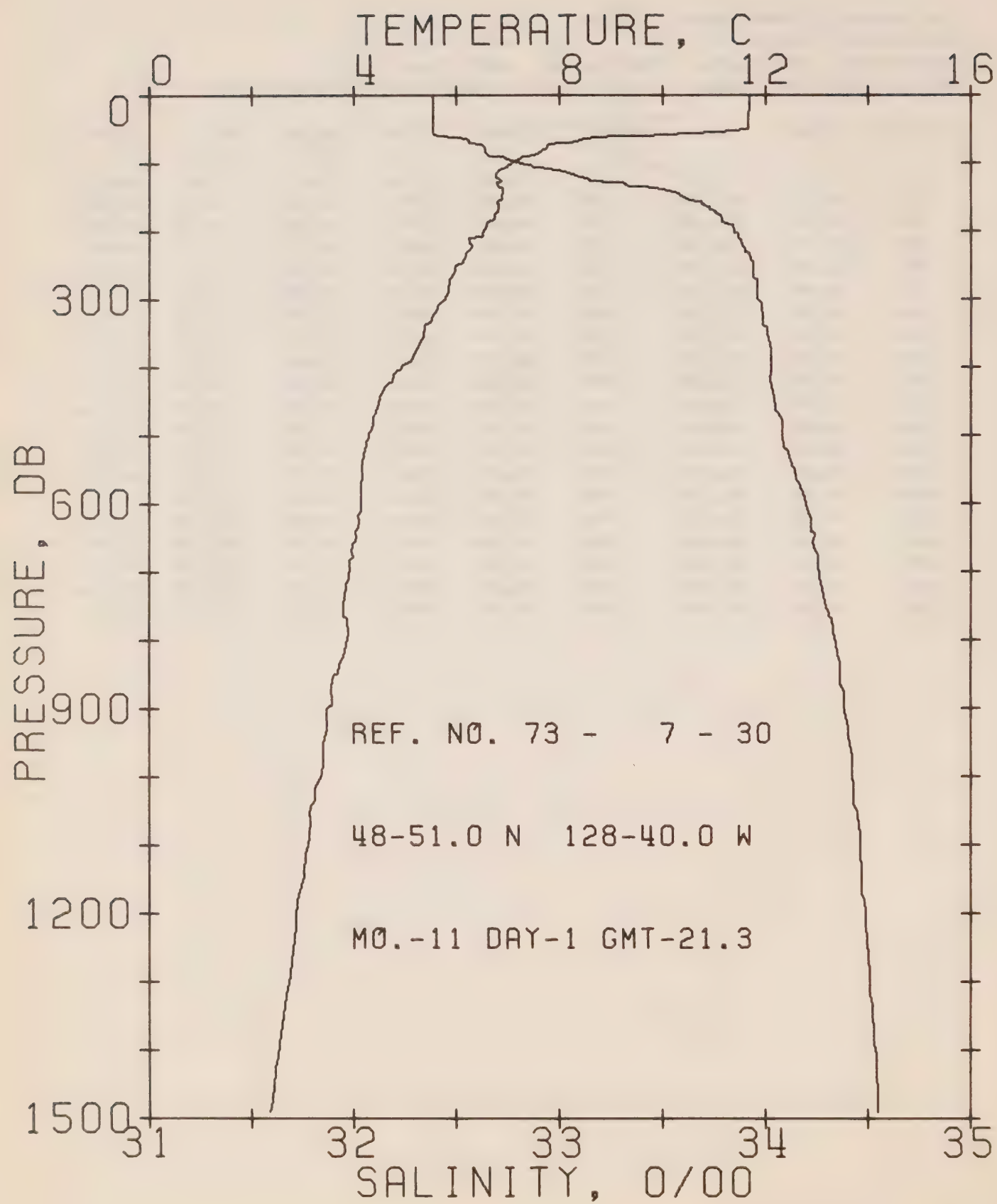
REFERENCE NO. 73- 7- 29

DATE 1/11/73

POSITION 49- 2.0N, 130-40.0W GMT 15.4

RESULTS OF STP CAST 215 POINTS TAKEN FROM ANALOG TRACE

PRFSS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.73	32.17	0	24.65	330.5	0.0	0.0	1489.
10	10.71	32.17	10	24.65	330.4	0.33	0.02	1490.
20	10.71	32.18	20	24.66	330.0	0.66	0.07	1490.
30	10.71	32.18	30	24.66	330.2	0.99	0.15	1490.
50	10.02	32.32	50	24.88	309.0	1.64	0.42	1488.
75	6.84	33.03	75	25.91	211.0	2.26	0.81	1477.
100	6.39	33.29	99	26.18	186.0	2.77	1.26	1476.
125	6.38	33.56	124	26.39	166.3	3.21	1.77	1477.
150	6.26	33.76	149	26.56	150.2	3.61	2.31	1477.
175	6.07	33.84	174	26.66	141.8	3.97	2.92	1477.
200	5.75	33.89	199	26.73	134.8	4.32	3.58	1476.
225	5.52	33.91	223	26.77	130.9	4.65	4.30	1475.
250	5.31	33.93	248	26.82	127.2	4.97	5.08	1475.
300	5.00	33.98	298	26.89	120.1	5.59	6.82	1475.
400	4.51	34.05	397	27.00	110.6	6.74	10.91	1474.
500	4.31	34.15	496	27.10	101.8	7.80	15.75	1475.
600	3.88	34.20	595	27.19	94.3	8.78	21.25	1475.
800	3.41	34.31	793	27.32	82.6	10.55	33.82	1477.
1000	3.07	34.41	990	27.43	72.7	12.10	47.98	1479.
1200	2.75	34.48	1188	27.52	65.2	13.47	63.43	1481.



OFFSHORE OCEANOGRAPHY GROUP

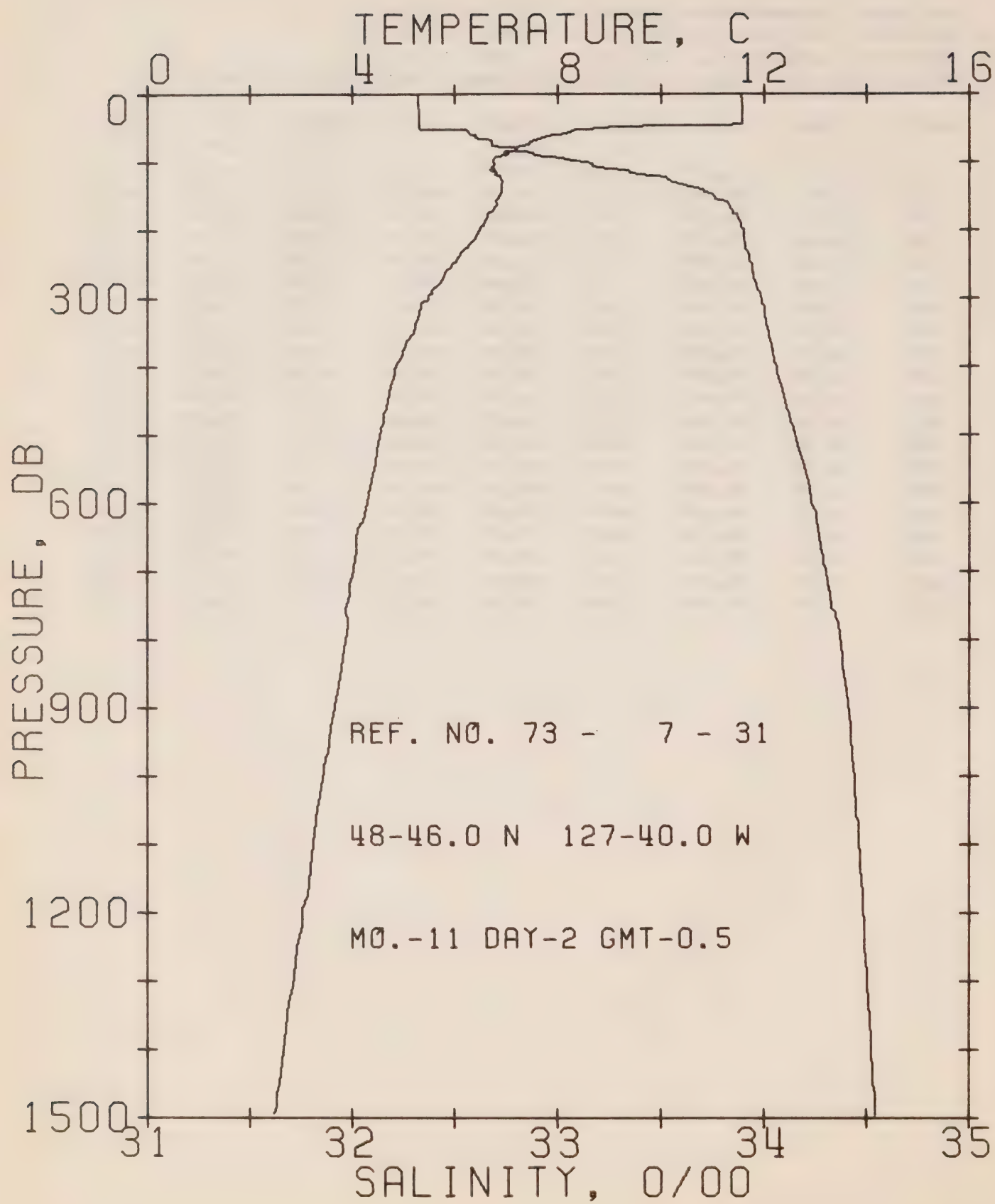
REFERENCE NO. 73- 7- 30

DATE 1/11/73

POSITION 48-51.0N, 128-40.0W GMT 21.3

RESULTS OF STP CAST 234 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.67	32.38	0	24.64	330.8	0.0	0.0	1493.
10	11.67	32.39	10	24.65	330.5	0.33	0.02	1493.
20	11.67	32.39	20	24.65	330.7	0.66	0.07	1493.
30	11.66	32.39	30	24.65	330.9	0.99	0.15	1493.
50	11.64	32.39	50	24.65	330.9	1.65	0.42	1494.
75	7.75	32.63	75	25.48	252.7	2.37	0.88	1480.
100	7.08	32.92	99	25.72	230.1	2.99	1.42	1478.
125	6.87	33.15	124	26.00	203.1	3.52	2.03	1478.
150	6.88	33.60	149	26.36	170.1	3.98	2.67	1479.
175	6.76	33.77	174	26.50	156.4	4.38	3.34	1479.
200	6.53	33.85	199	26.60	147.6	4.76	4.06	1479.
225	6.28	33.90	223	26.67	141.0	5.12	4.84	1478.
250	6.04	33.94	248	26.73	135.4	5.47	5.68	1478.
300	5.78	33.96	298	26.78	131.2	6.13	7.54	1478.
400	4.94	34.03	397	26.94	117.1	7.36	11.93	1476.
500	4.29	34.08	496	27.05	106.9	8.48	17.03	1475.
600	4.13	34.19	595	27.15	97.6	9.50	22.74	1476.
800	3.86	34.34	793	27.30	85.6	11.32	35.68	1478.
1000	3.33	34.42	991	27.42	74.7	12.90	50.17	1480.
1200	2.86	34.49	1188	27.51	65.7	14.30	65.83	1481.



OFFSHORE OCEANOGRAPHY GROUP

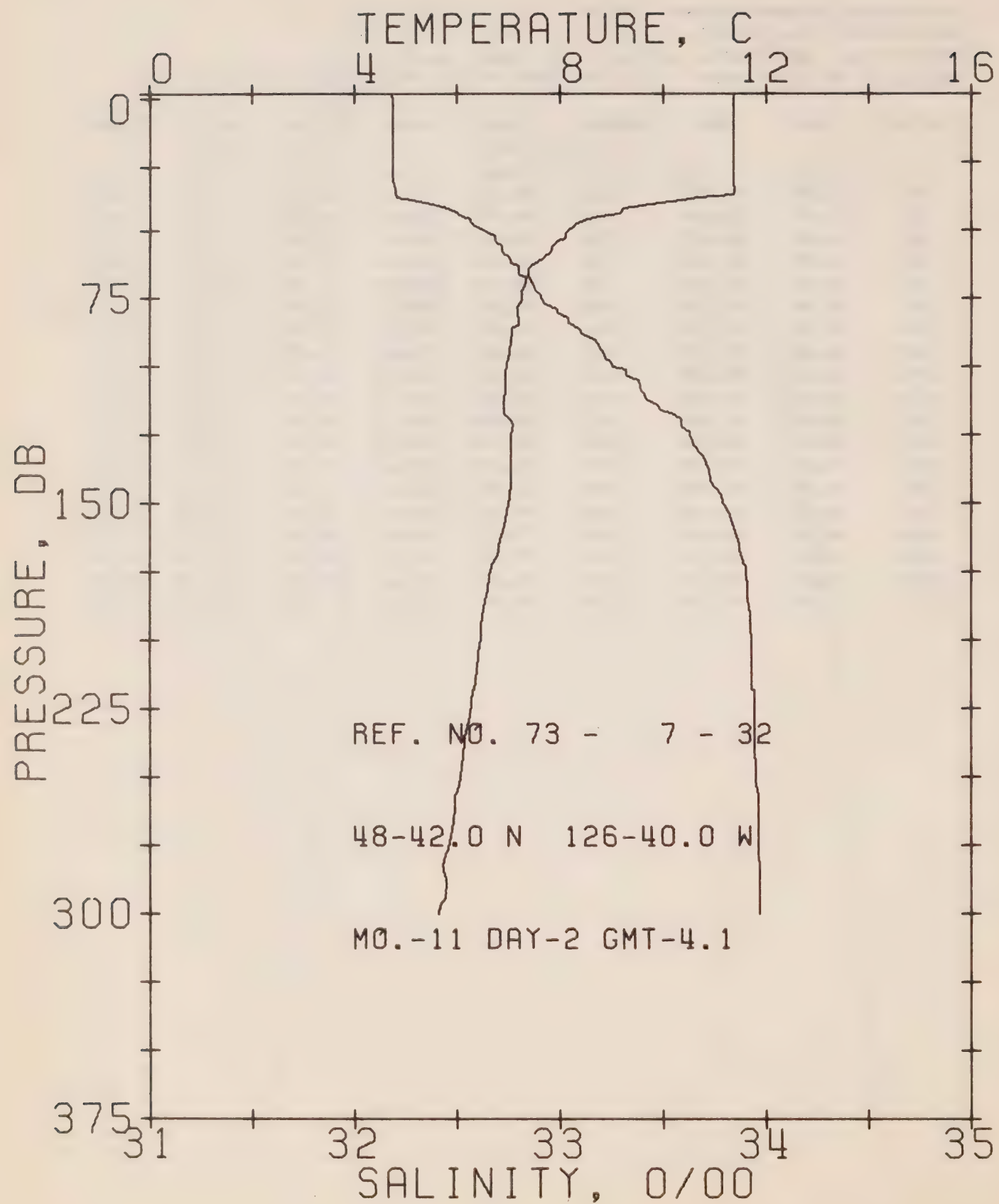
REFERENCE NO. 73- 7- 31

DATE 2/11/73

POSITION 48-46.0N, 127-40.0W GMT 0.5

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.55	32.32	0	24.62	333.2	0.0	0.0	1493.
10	11.57	32.32	10	24.61	334.0	0.33	0.02	1493.
20	11.57	32.32	20	24.62	333.9	0.67	0.07	1493.
30	11.58	32.33	30	24.62	334.0	1.00	0.15	1493.
50	8.99	32.33	50	25.06	292.5	1.66	0.42	1484.
75	7.36	32.68	75	25.57	243.9	2.30	0.83	1479.
100	6.76	33.14	99	26.01	202.0	2.86	1.33	1477.
125	6.90	33.53	124	26.30	175.0	3.34	1.87	1479.
150	6.86	33.75	149	26.48	158.6	3.75	2.45	1479.
175	6.65	33.85	174	26.58	148.8	4.14	3.09	1479.
200	6.47	33.90	199	26.65	143.1	4.50	3.78	1479.
225	6.25	33.91	223	26.68	139.9	4.86	4.55	1478.
250	5.97	33.94	248	26.74	134.6	5.20	5.38	1478.
300	5.47	33.98	298	26.84	125.8	5.85	7.20	1476.
400	4.86	34.06	397	26.97	114.0	7.05	11.47	1476.
500	4.53	34.15	496	27.08	104.6	8.14	16.48	1476.
600	4.30	34.23	595	27.17	96.6	9.14	22.09	1477.
800	3.86	34.37	793	27.32	83.1	10.93	34.78	1479.
1000	3.43	34.44	991	27.42	74.6	12.50	49.19	1480.
1200	3.01	34.48	1188	27.50	67.9	13.93	65.16	1482.



OFFSHORE OCEANOGRAPHY GROUP

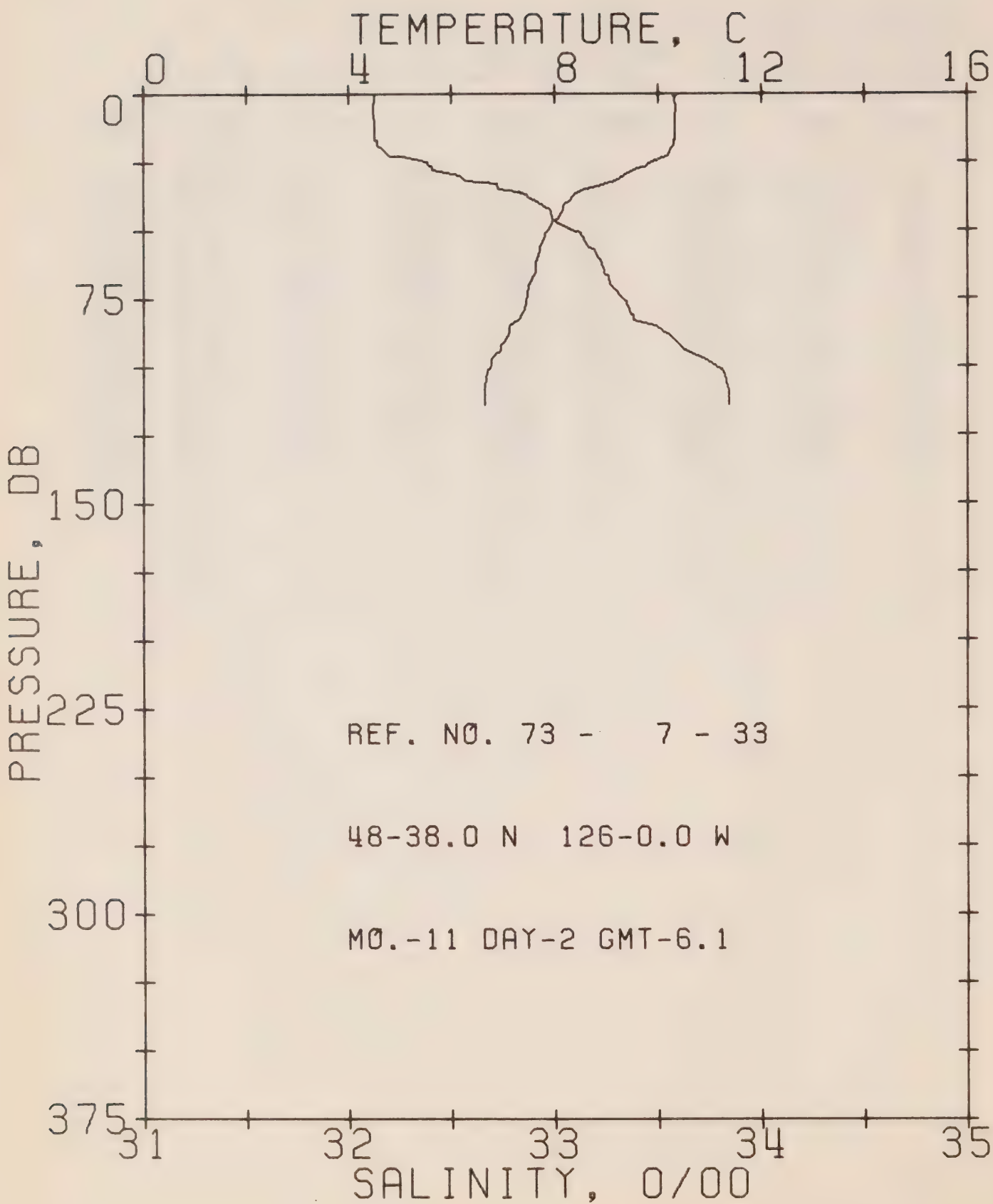
REFERENCE NO. 73- 7- 32

DATE 2/11/73

POSITION 48-42.0N, 126-40.0W GMT 4.1

RESULTS OF STP CAST 119 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.35	32.18	0	24.54	340.1	0.0	0.0	1492.
10	11.36	32.19	10	24.55	340.1	0.34	0.02	1492.
20	11.37	32.19	20	24.55	340.4	0.68	0.07	1492.
30	11.37	32.19	30	24.55	340.6	1.02	0.16	1492.
50	8.15	32.63	50	25.42	258.0	1.63	0.40	1481.
75	7.24	32.91	75	25.77	225.1	2.23	0.78	1478.
100	6.95	33.25	99	26.07	196.3	2.75	1.25	1478.
125	7.05	33.63	124	26.36	169.7	3.20	1.76	1479.
150	6.98	33.79	149	26.49	157.3	3.61	2.34	1480.
175	6.63	33.90	174	26.63	144.8	3.99	2.96	1479.
200	6.43	33.93	199	26.68	140.4	4.35	3.64	1479.
225	6.25	33.94	223	26.71	137.6	4.69	4.39	1478.
250	6.06	33.95	248	26.74	134.8	5.03	5.22	1478.
300	5.64	33.97	298	26.81	128.8	5.69	7.06	1477.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- 7- 33

DATE 2/11/73

POSITION 48-38.0N, 126- 0.0W

GMT 6.1

RESULTS OF STP CAST

72 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.36	32.12	0	24.67	328.1	0.0	0.0	1488.
10	10.33	32.13	10	24.68	327.6	0.33	0.02	1488.
20	10.23	32.16	20	24.72	323.6	0.65	0.07	1488.
30	9.34	32.54	30	25.16	281.7	0.96	0.14	1485.
50	7.86	33.08	50	25.81	220.5	1.45	0.34	1481.
75	7.45	33.33	75	26.07	196.8	1.96	0.67	1480.
100	6.76	33.78	99	26.52	154.3	2.41	1.06	1478.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	10.36	32.12	51.	7.81	33.13
1.	10.29	32.13	52.	7.80	33.13
1.	10.33	32.13	53.	7.79	33.14
6.	10.34	32.12	54.	7.75	33.14
7.	10.33	32.12	56.	7.72	33.16
12.	10.33	32.13	57.	7.70	33.19
13.	10.33	32.13	59.	7.67	33.20
14.	10.33	32.13	62.	7.64	33.23
16.	10.33	32.13	63.	7.63	33.23
17.	10.32	32.13	65.	7.62	33.24
17.	10.28	32.14	66.	7.60	33.24
19.	10.29	32.14	67.	7.57	33.26
20.	10.23	32.16	68.	7.55	33.26
23.	10.17	32.20	70.	7.49	33.27
23.	10.16	32.26	76.	7.44	33.34
25.	9.88	32.38	76.	7.44	33.35
26.	9.78	32.39	77.	7.44	33.35
27.	9.72	32.41	81.	7.37	33.37
27.	9.68	32.41	81.	7.35	33.38
29.	9.52	32.41	83.	7.27	33.38
30.	9.34	32.54	85.	7.13	33.49
32.	9.17	32.57	87.	7.11	33.52
33.	8.99	32.72	88.	7.09	33.55
34.	8.84	32.72	91.	7.00	33.59
35.	8.58	32.73	92.	6.97	33.60
36.	8.49	32.82	94.	6.95	33.63
37.	8.36	32.86	96.	6.84	33.69
38.	8.32	32.87	97.	6.78	33.72
39.	8.30	32.90	99.	6.77	33.76
41.	8.17	32.94	100.	6.76	33.78
42.	8.15	32.97	101.	6.72	33.81
43.	8.12	32.98	101.	6.69	33.81
44.	8.10	32.98	105.	6.66	33.83
46.	8.04	32.99	106.	6.65	33.83
47.	7.96	33.01	109.	6.65	33.84
50.	7.86	33.08	114.	6.65	33.84

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- 7- 34

DATE 2/11/73

POSITION 48-33.0N, 125-33.0W GMT 7.6

RESULTS OF STP CAST 40 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.94	32.24	0	24.66	328.8	0.0	0.0	1490.
10	10.82	32.26	10	24.70	325.7	0.33	0.02	1490.
20	10.41	32.36	20	24.85	311.7	0.64	0.07	1489.
30	8.77	32.85	30	25.50	250.2	0.93	0.14	1484.
50	7.29	33.48	50	26.21	183.0	1.36	0.31	1479.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	10.94	32.24	26.	9.63	32.60
0.	10.89	32.24	27.	9.26	32.60
4.	10.90	32.25	29.	8.94	32.72
5.	10.92	32.25	30.	8.77	32.85
6.	10.92	32.25	31.	8.56	32.94
6.	10.92	32.25	32.	8.47	32.95
8.	10.81	32.25	33.	8.38	32.96
9.	10.80	32.25	33.	8.27	32.99
10.	10.82	32.26	34.	8.20	33.00
12.	10.65	32.27	36.	8.19	33.04
12.	10.63	32.27	37.	8.18	33.05
14.	10.60	32.31	40.	8.07	33.06
14.	10.52	32.31	41.	7.83	33.14
18.	10.42	32.35	42.	7.74	33.19
20.	10.41	32.36	44.	7.66	33.30
21.	10.33	32.37	45.	7.41	33.37
22.	10.24	32.43	48.	7.37	33.40
23.	10.04	32.50	49.	7.36	33.45
24.	9.86	32.57	49.	7.33	33.48
24.	9.72	32.60	50.	7.29	33.48

SURFACE TEMPERATURE AND SALINITY OBSERVATIONS
(P-73-7)

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 73- 7

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
73	9	15	330	32.101	10.8	125-33
73	9	15	330	32.101	10.8	125-33
73	9	15	530	32.254	11.8	126- 0
73	9	15	810	32.146	14.7	126-40
73	9	15	1150	32.144	15.2	127-40
73	9	15	1450	32.381	15.3	128-40
73	9	15	1843	32.470		129-40
73	9	15	2130	32.531	15.7	130-40
73	9	16	235	32.574	15.0	132-40
73	9	16	1300	32.324	13.9	136-40
73	9	16	1900	32.444	13.8	138-40
73	9	17	50	32.364	13.2	140-40
73	9	18	0	32.436	12.5	145- 0
73	9	19	0	32.448	12.5	ON STATION
73	9	20	0	32.435	12.5	ON STATION
73	9	21	0	32.501	12.5	ON STATION
73	9	22	0	32.451	12.4	ON STATION
73	9	23	0	32.443	12.4	ON STATION
73	9	24	0	32.436	12.3	ON STATION
73	9	25	0	32.416	12.2	ON STATION
73	9	26	0	32.434	12.3	ON STATION
73	9	27	0	32.419	12.0	ON STATION
73	9	28	0	32.428	11.8	ON STATION
73	10	4	0	32.432	11.8	ON STATION
73	10	5	0	32.441	11.7	ON STATION
73	10	6	0	32.437	11.7	ON STATION
73	10	7	0	32.438	11.7	ON STATION
73	10	8	0	32.449	11.7	ON STATION
73	10	9	0	32.437	11.6	ON STATION
73	10	10	0	32.442	11.8	ON STATION
73	10	11	0	32.432	11.6	ON STATION
73	10	12	0	32.445	11.6	ON STATION
73	10	13	0	32.447	11.3	ON STATION
73	10	14	0	32.445	10.9	ON STATION
73	10	15	0	32.451	10.9	ON STATION
73	10	16	0	32.443	11.0	ON STATION
73	10	17	0	32.440	10.8	ON STATION
73	10	18	0	32.473	10.6	ON STATION
73	10	19	0	32.470	10.6	ON STATION
73	10	20	0	32.480	10.2	ON STATION
73	10	21	0	32.475	10.1	ON STATION
73	10	22	0	32.462	10.0	ON STATION
73	10	23	0	32.471	10.0	ON STATION
73	10	24	0	32.516	9.9	ON STATION
73	10	25	0	32.475	9.7	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 73- 7

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
73	10	25	0	32.475	9.7	ON STATION
73	10	26	0	32.469	9.6	ON STATION
73	10	27	0	32.490	9.7	ON STATION
73	10	28	0	32.487	9.4	ON STATION
73	10	29	0	32.495	9.4	ON STATION
73	10	30	0	32.494	9.3	ON STATION
73	10	30	2300	32.517		143-40
73	10	31	200	32.495	9.1	142-40
73	10	31	745	32.399	9.8	140-40
73	10	31	1400	32.466	10.1	138-40
73	10	31	2035	32.304	10.3	136-40
73	11	1	305	32.465	10.6	134-40
73	11	1	900	32.226	9.6	132-40
73	11	1	1525	32.140	10.6	130-40
73	11	1	2120	32.357	11.7	128-40
73	11	2	30	32.308	11.6	127-40
73	11	2	409	32.170	11.3	126-40
73	11	2	605	32.105	10.2	126- 0
73	11	2	730	32.212	11.0	125-33

OCEANOGRAPHIC DATA OBTAINED ON CRUISE P-73-8
(CODC REFERENCE NO. 15-73-008)

RESULTS OF HYDROGRAPHIC OBSERVATIONS

(P-73-8)

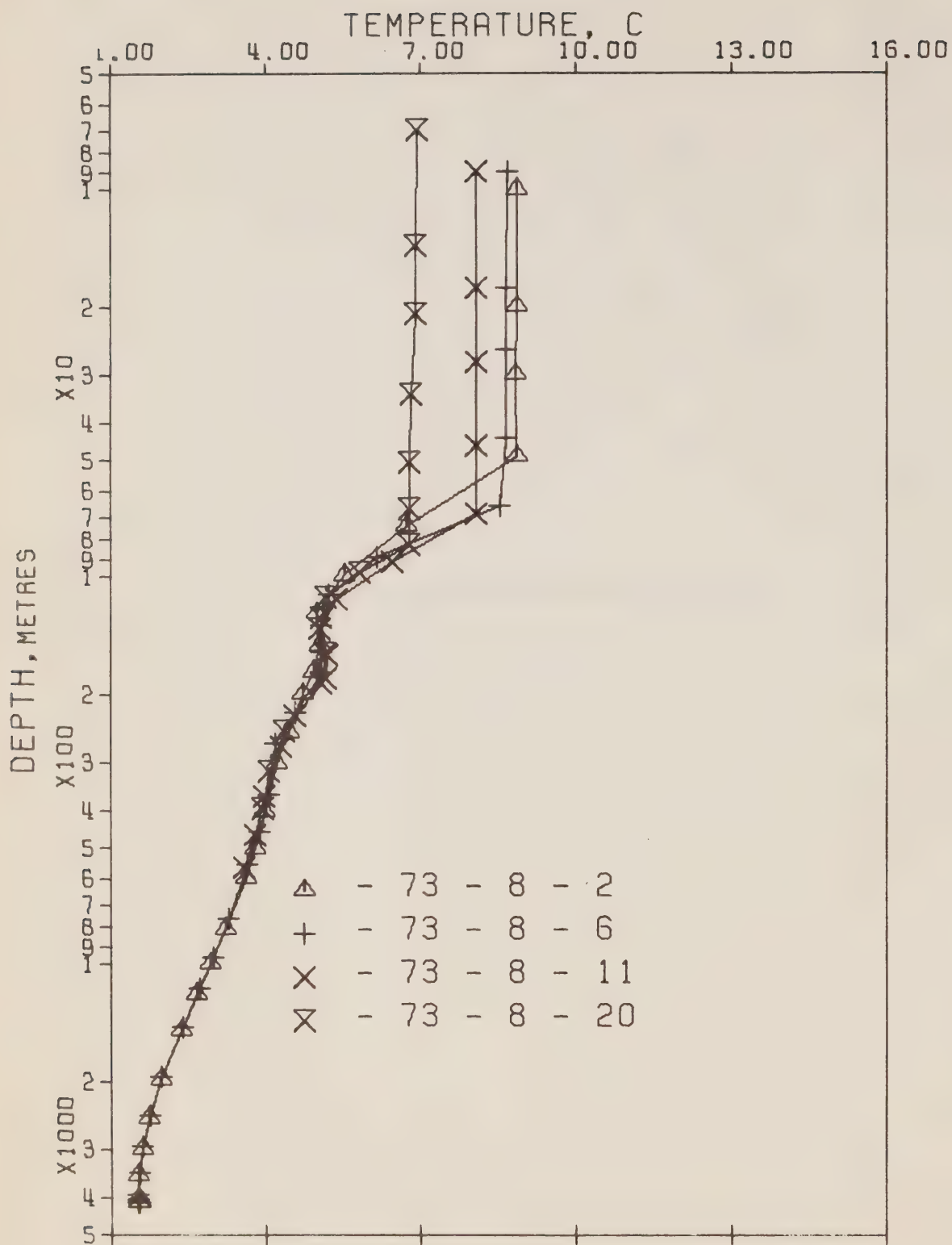


Figure 7 Composite plot of temperature vs \log_{10} depth. P-73-8.

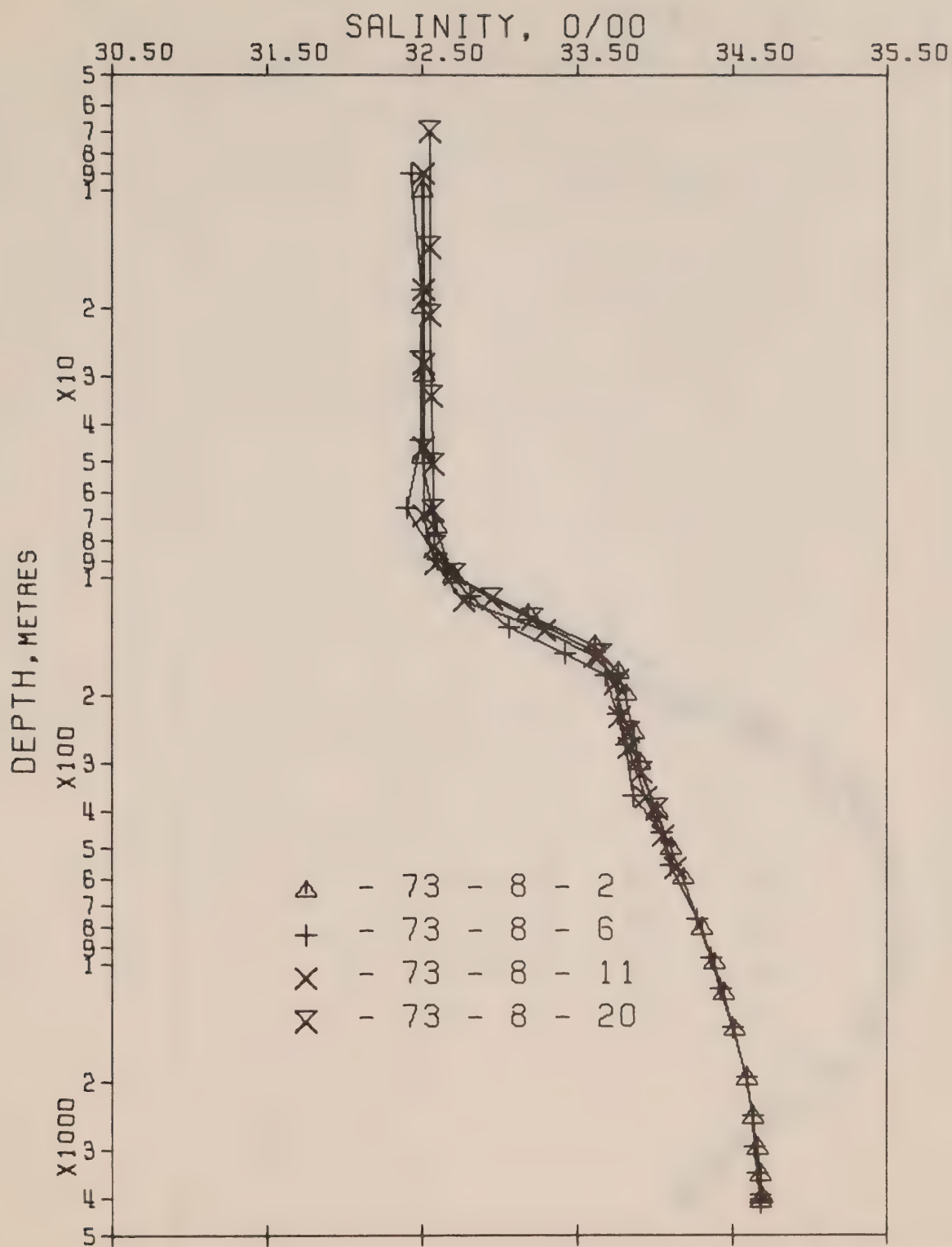


Figure 8 Composite plot of salinity vs \log_{10} depth. P-73-8.

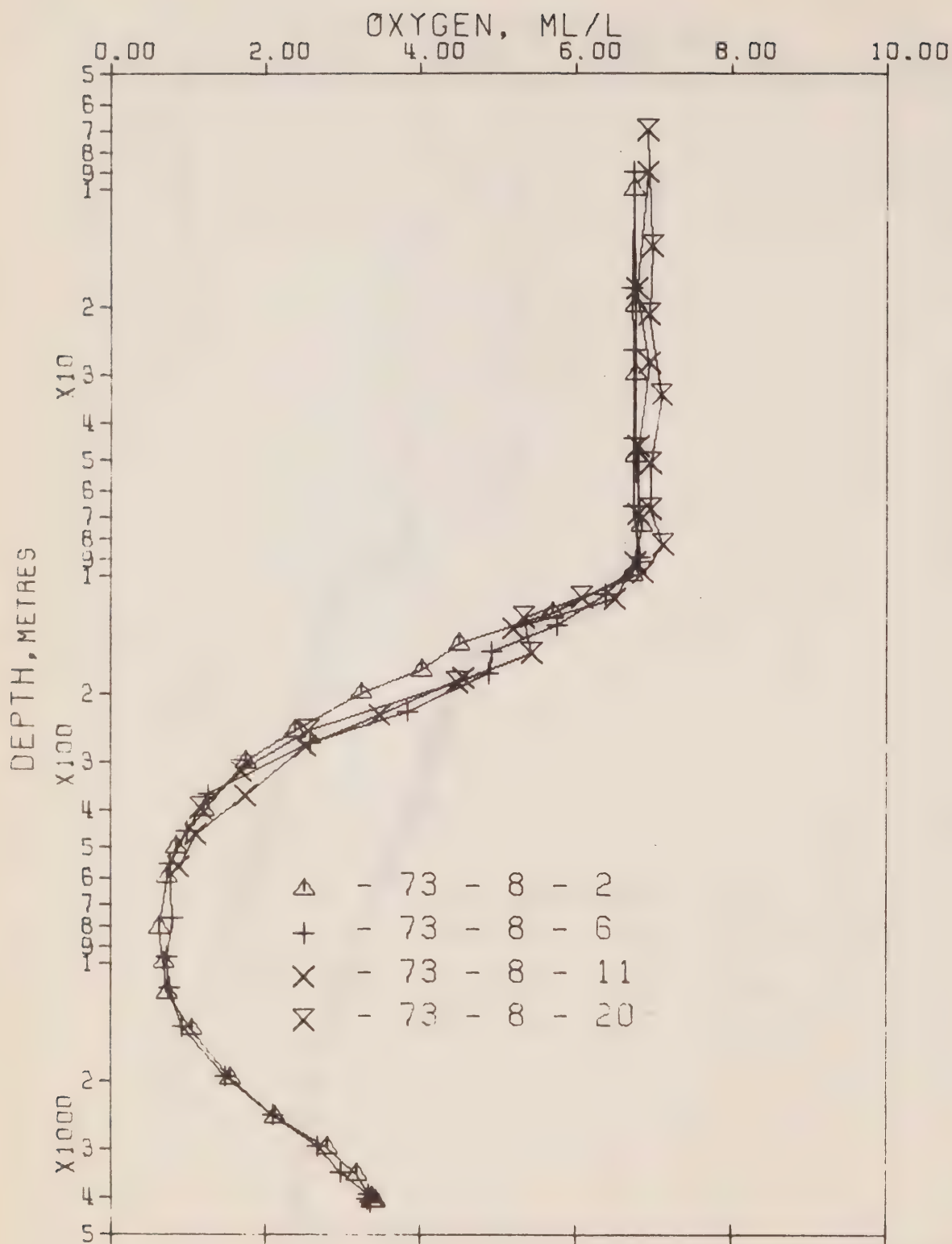
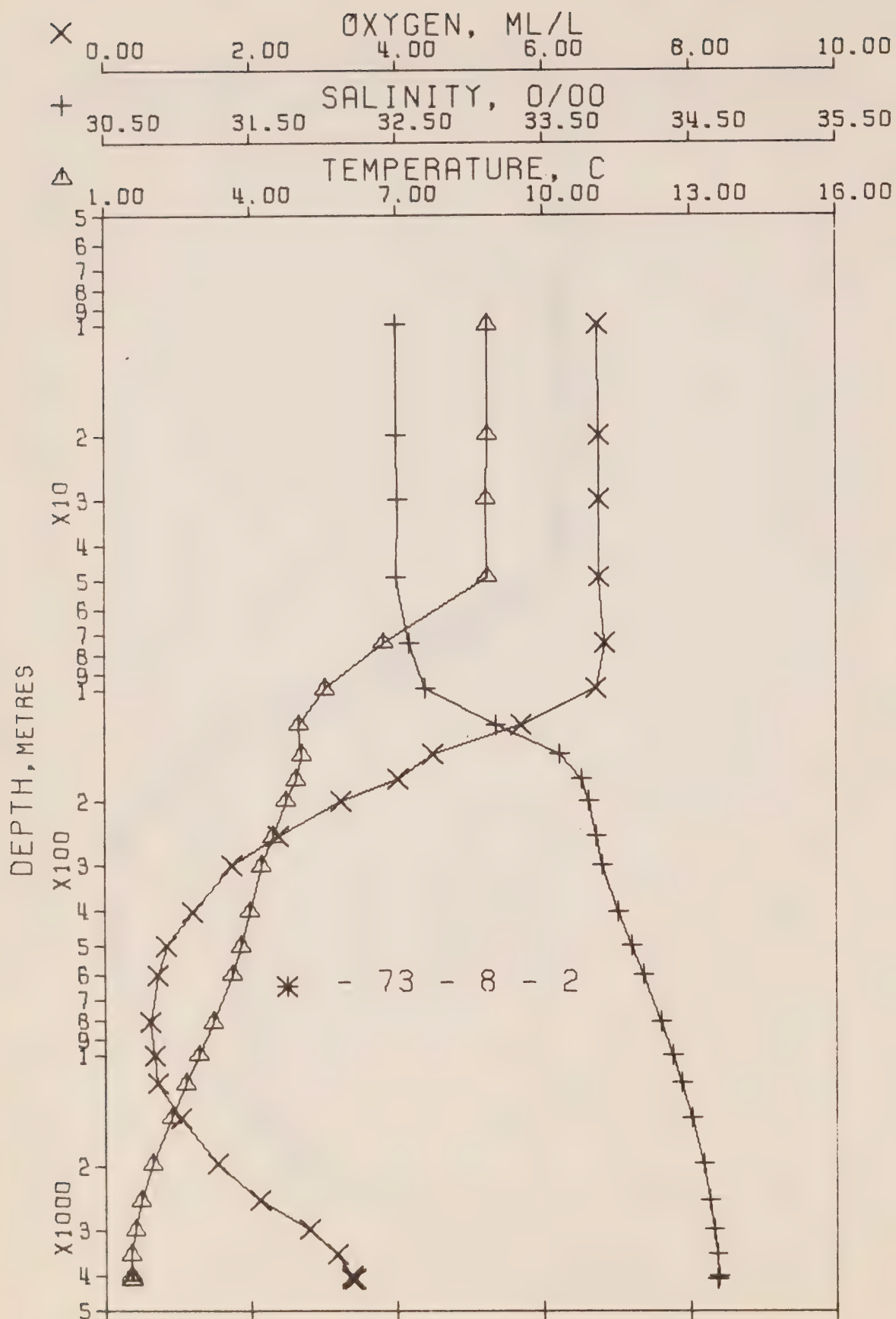


Figure 9 Composite plot of oxygen vs \log_{10} depth. P-73-8.



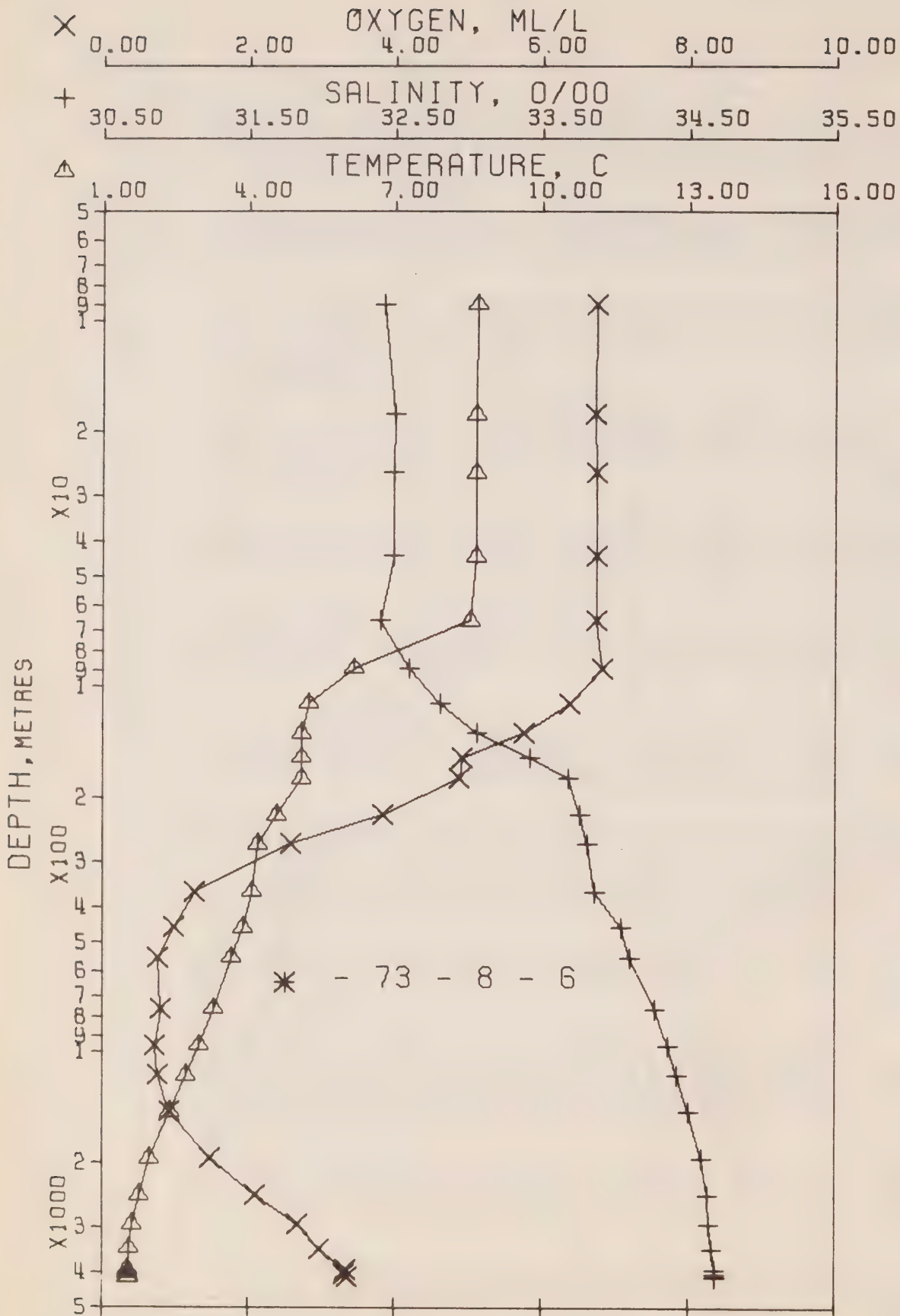
DATE 31/10/73

REFERENCE NO. 73- 8- 2

OFFSHORE OCEANOGRAPHY GROUP
POSITION 50- 0.0 N, 145- 0.0 W GMT 18.3

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	QXY	SOUND
0	8.90	32.504	0	25.206	277.3	8.90	277.1	0.0	0.0	6.76	1483.
10	8.86	32.505	10	25.213	276.8	8.86	276.5	0.28	0.01	6.74	1483.
20	8.86	32.505	20	25.213	277.0	8.86	276.5	0.56	0.05	6.75	1483.
30	8.84	32.510	30	25.220	276.5	8.84	275.7	0.84	0.13	6.76	1483.
49	8.85	32.505	49	25.214	277.4	8.84	276.3	1.37	0.34	6.75	1484.
74	6.72	32.592	74	25.586	242.1	6.71	240.9	2.03	0.76	6.85	1476.
100	5.53	32.701	99	25.819	220.0	5.52	218.7	2.61	1.28	6.73	1472.
125	4.98	33.180	124	26.261	178.3	4.97	176.8	3.11	1.85	5.70	1471.
151	5.05	33.611	150	26.594	147.0	5.04	145.1	3.53	2.44	4.50	1472.
176	4.93	33.761	175	26.726	134.7	4.92	132.5	3.88	3.03	4.02	1472.
201	4.72	33.806	200	26.785	129.3	4.70	126.9	4.21	3.65	3.24	1472.
253	4.44	33.857	251	26.856	122.9	4.42	120.1	4.86	5.15	2.39	1471.
304	4.22	33.904	302	26.917	117.5	4.20	114.3	5.48	6.91	1.73	1471.
406	3.98	34.011	403	27.027	107.8	3.95	103.9	6.62	11.07	1.21	1472.
506	3.79	34.103	502	27.119	99.8	3.75	95.1	7.66	15.88	0.85	1473.
604	3.62	34.185	599	27.201	92.6	3.58	87.3	8.60	21.21	0.72	1474.
815	3.23	34.302	808	27.332	81.2	3.17	74.8	10.43	34.42	0.62	1476.
1007	2.91	34.381	997	27.424	73.1	2.84	66.0	11.90	48.08	0.68	1478.
1201	2.66	34.436	1189	27.490	67.4	2.58	59.6	13.26	63.42	0.71	1480.
1498	2.36	34.506	1482	27.571	60.5	2.26	51.8	15.16	89.49	1.03	1484.
2004	1.95	34.595	1980	27.676	51.3	1.81	41.7	17.96	139.39	1.54	1491.
2520	1.73	34.632	2486	27.722	47.8	1.55	37.1	20.49	197.85	2.12	1498.
3038	1.61	34.663	2994	27.756	45.5	1.38	33.5	22.90	266.14	2.80	1507.
3557	1.52	34.680	3501	27.776	44.5	1.24	31.3	25.22	344.25	3.19	1515.
4070	1.52	34.687	4001	27.782	45.4	1.19	30.5	27.51	433.19	3.37	1524.
4161	1.52	34.684	4090	27.779	45.9	1.18	30.6	27.93	450.65	3.39	1526.
4171	1.53	34.685	4100	27.780	46.0	1.19	30.6	27.97	452.65	3.42	1526.



DATE 6/11/73

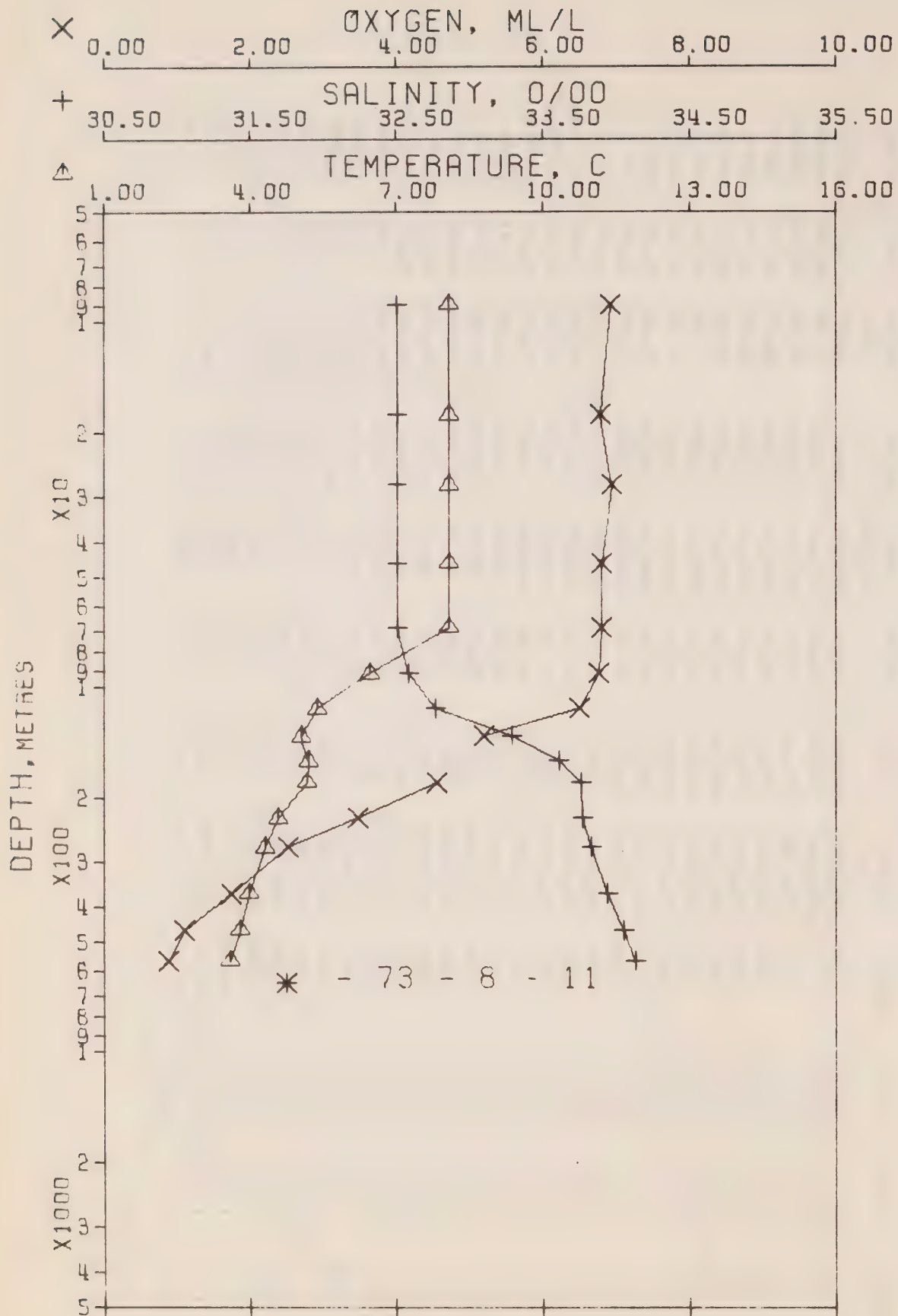
REFERENCE NO. 73- 8- 6

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N, 145- 0.0 W GMT 18.0

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.68	32.497	0	25.234	274.7	8.68	274.5	0.0	0.0	6.70	1482.
9	8.69	32.431	9	25.181	279.9	8.69	279.5	0.25	0.01	6.74	1482.
13	8.64	32.496	18	25.239	274.4	8.64	273.9	0.50	0.05	6.73	1482.
26	8.64	32.495	26	25.238	274.7	8.64	274.0	0.72	0.10	6.74	1483.
44	8.65	32.490	44	25.233	275.5	8.65	274.5	1.22	0.27	6.74	1483.
66	8.53	32.400	66	25.181	280.8	8.52	279.4	1.84	0.63	6.74	1483.
90	6.16	32.599	89	25.663	234.9	6.15	233.6	2.44	1.10	6.81	1474.
112	5.24	32.807	111	25.937	208.9	5.23	207.6	2.93	1.60	6.38	1471.
135	5.07	33.065	134	26.160	188.0	5.06	186.4	3.39	2.13	5.76	1471.
157	5.09	33.418	156	26.437	161.9	5.08	160.0	3.78	2.76	4.91	1472.
180	5.08	33.685	179	26.649	142.1	5.07	139.8	4.13	3.35	4.87	1473.
227	4.56	33.757	225	26.764	131.4	4.54	128.9	4.75	4.65	3.84	1471.
273	4.18	33.812	271	26.848	123.7	4.16	120.9	5.34	6.15	2.57	1470.
367	4.05	33.857	364	26.897	119.8	4.02	116.2	6.48	9.89	1.27	1472.
462	3.89	34.045	458	27.063	104.8	3.86	100.4	7.55	14.37	0.97	1473.
557	3.65	34.098	552	27.129	99.1	3.61	94.2	8.51	19.38	0.76	1473.
768	3.29	34.274	761	27.304	83.6	3.24	77.4	10.44	32.34	0.80	1475.
969	2.97	34.360	960	27.402	75.1	2.90	68.0	12.02	46.40	0.72	1477.
1172	2.72	34.425	1160	27.476	68.8	2.64	60.9	13.48	62.26	0.75	1480.
1477	2.37	34.497	1461	27.563	61.1	2.27	52.5	15.45	88.92	0.92	1484.
1985	1.97	34.589	1961	27.669	51.9	1.83	42.3	18.29	138.98	1.49	1490.
2494	1.75	34.629	2461	27.718	48.2	1.57	37.4	20.81	196.67	2.11	1493.
3001	1.61	34.644	2958	27.741	46.8	1.39	35.0	23.21	263.90	2.68	1506.
3506	1.53	34.660	3451	27.760	46.0	1.26	32.9	25.55	341.35	2.98	1514.
4005	1.52	34.681	3938	27.777	45.6	1.20	30.9	27.83	428.48	3.34	1523.
4103	1.52	34.681	4034	27.777	45.9	1.18	30.8	28.28	447.11	3.33	1525.
4193	1.52	34.684	4121	27.779	46.0	1.17	30.6	28.69	464.42	0.0	1526.
4203	1.53	34.684	4131	27.779	46.1	1.18	30.6	28.73	466.44	3.37	1526.

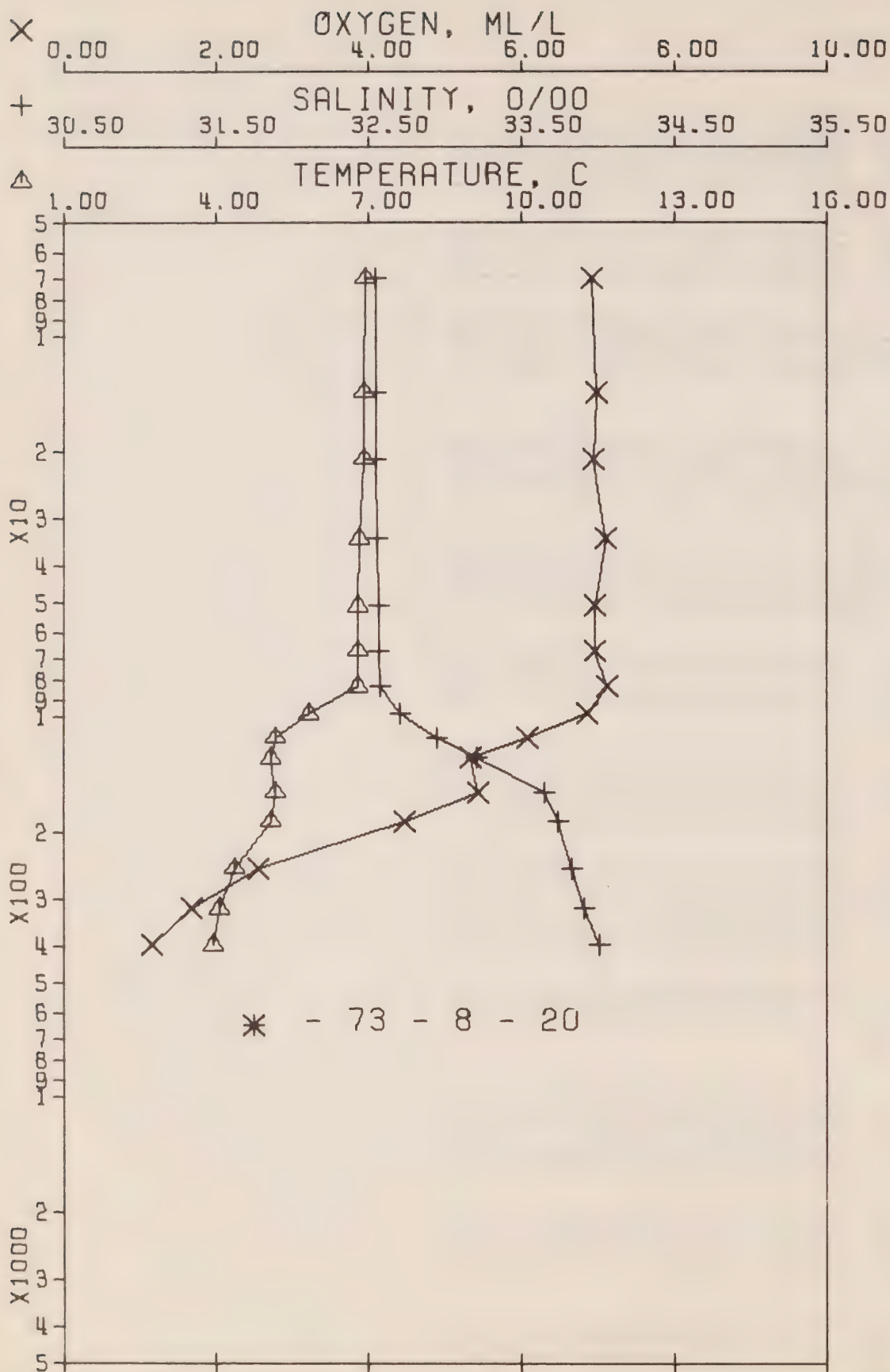


OFFSHORE OCEANOGRAPHY GROUP
 POSITION 50- 0.0 N. 145- 0.0 W GMT 18.4
 HYDROGRAPHIC CAST DATA

REFERENCE NO. 73- 8- 11

DATE 14/11/73

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.08	32.518	0	25.340	264.6	8.08	264.4	0.0	0.0	6.91	1480.
9	8.08	32.512	9	25.335	265.2	8.08	264.9	0.24	0.01	6.92	1480.
19	8.08	32.512	18	25.335	265.3	8.08	264.9	0.48	0.04	6.77	1480.
29	8.08	32.512	28	25.335	265.5	8.08	264.8	0.75	0.11	6.94	1480.
46	8.08	32.510	46	25.333	265.9	8.08	264.9	1.23	0.29	6.81	1481.
69	8.09	32.510	69	25.332	266.4	8.08	265.0	1.85	0.66	6.80	1481.
93	6.47	32.588	92	25.615	239.5	6.46	238.1	2.44	1.14	6.75	1475.
116	5.39	32.771	115	25.891	213.4	5.38	211.9	2.96	1.70	6.49	1472.
138	5.05	33.288	137	26.339	171.1	5.04	169.3	3.39	2.25	5.20	1471.
161	5.20	33.615	160	26.580	148.5	5.19	146.4	3.76	2.81	0.0	1473.
184	5.16	33.762	183	26.701	137.3	5.15	134.9	4.08	3.39	4.56	1473.
231	4.58	33.773	229	26.775	130.5	4.56	127.9	4.70	4.69	3.48	1471.
277	4.30	33.835	275	26.854	123.3	4.28	120.4	5.29	6.21	2.52	1471.
371	3.98	33.941	368	26.971	112.8	3.95	109.2	6.39	9.85	1.74	1471.
463	3.78	34.051	464	27.079	103.2	3.75	98.9	7.44	14.32	1.10	1472.
568	3.59	34.135	563	27.164	95.8	3.55	90.8	8.43	19.55	0.87	1473.



OFFSHORE OCEANOGRAPHY GROUP					REFERENCE NO. 73- 8- 20			DATE 6/12/73			
POSITION 50- 0.0 N. 145- 0.0 W GMT 18.1											
HYDROGRAPHIC CAST DATA											
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	6.94	32.556	0	25.529	246.7	6.94	246.4	0.0	0.0	6.95	1476.
7	6.93	32.553	7	25.528	246.8	6.93	246.5	0.17	0.01	6.92	1476.
14	6.90	32.552	14	25.531	246.7	6.90	246.2	0.35	0.02	6.97	1476.
21	6.90	32.549	21	25.528	246.9	6.90	246.4	0.52	0.06	6.94	1476.
34	6.82	32.561	34	25.548	245.2	6.82	244.5	0.84	0.15	7.10	1476.
51	6.79	32.568	51	25.558	244.5	6.79	243.6	1.26	0.33	6.97	1476.
67	6.79	32.569	67	25.559	244.6	6.78	243.5	1.66	0.57	6.97	1476.
84	6.78	32.577	83	25.566	244.1	6.77	242.7	2.05	0.87	7.11	1476.
99	5.82	32.713	98	25.794	222.4	5.81	221.1	2.41	1.20	6.87	1473.
114	5.16	32.946	113	26.056	197.6	5.15	196.2	2.72	1.54	6.08	1471.
129	5.08	33.213	128	26.276	176.9	5.07	175.3	3.01	1.89	5.35	1471.
159	5.17	33.650	158	26.611	145.5	5.16	143.4	3.49	2.60	5.43	1473.
189	5.09	33.737	188	26.689	138.4	5.08	136.0	3.91	3.35	4.48	1473.
252	4.36	33.834	250	26.847	123.8	4.34	121.1	4.73	5.19	2.55	1471.
321	4.07	33.912	319	26.939	115.5	4.05	112.2	5.56	7.61	1.67	1471.
401	3.95	34.007	398	27.027	107.8	3.92	103.9	6.44	10.88	1.17	1472.

RESULTS OF STD OBSERVATIONS

(P-73-8)

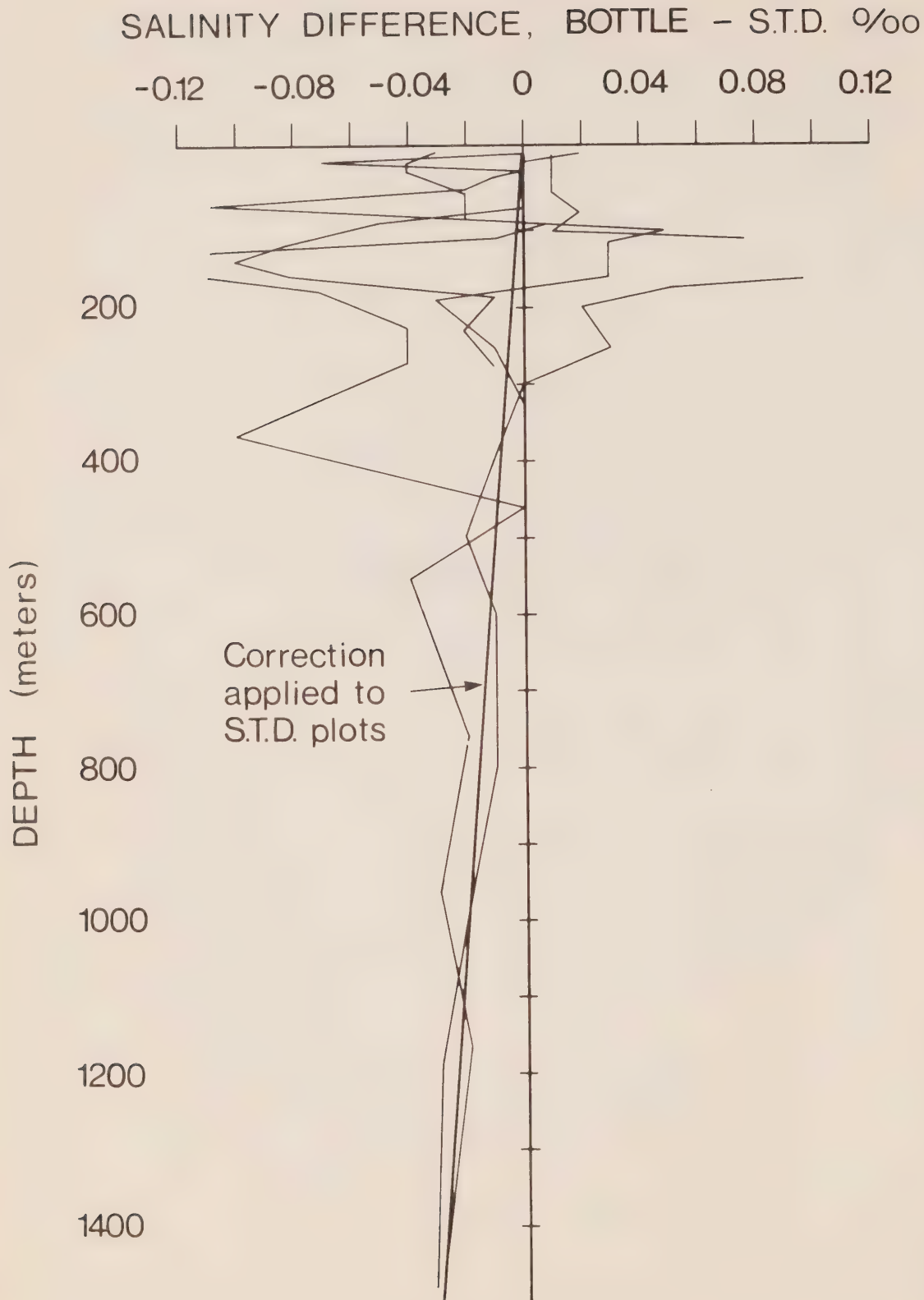


Figure 10 Salinity difference between hydro data and STD. P-73-8.

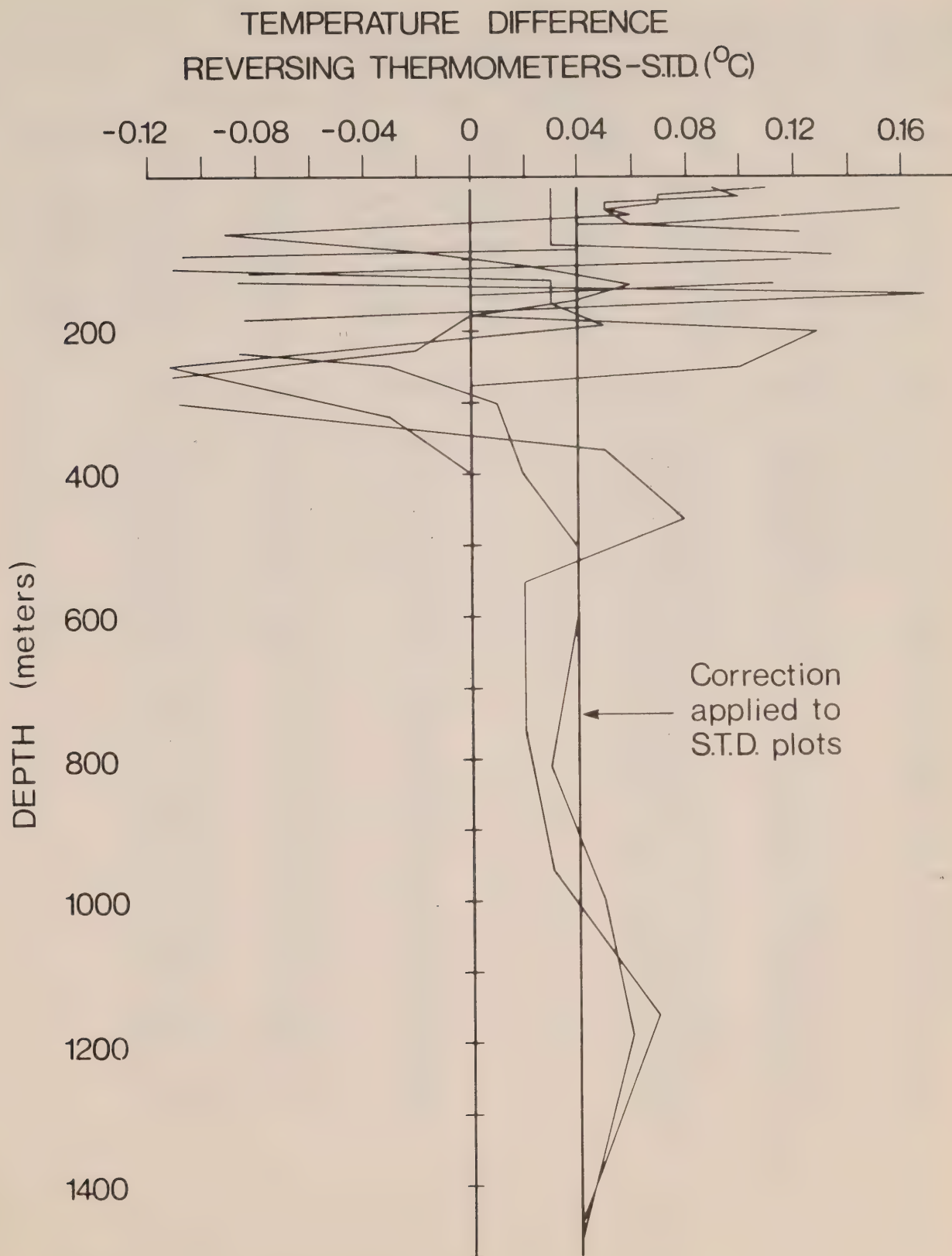


Figure 11 Temperature difference between hydro data and STD. P-73-8.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- B- 1

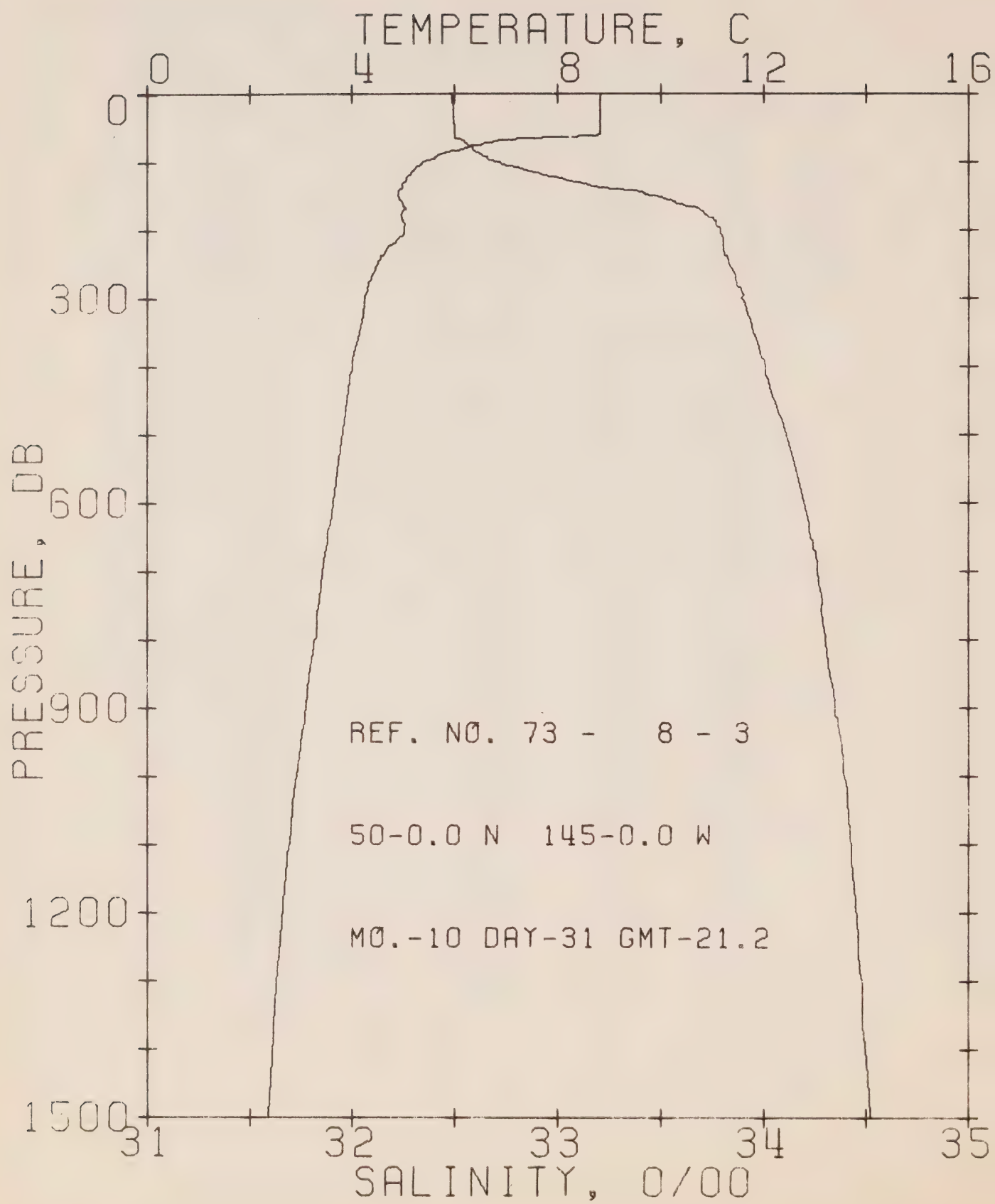
DATE 26/10/73

POSITION 48-33.0N, 125-33.0W GMT 22.9

RESULTS OF STD CAST 57 FCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.23	32.23	0	24.78	317.9	0.0	0.0	1488.
10	10.25	32.23	10	24.77	318.6	0.32	0.02	1488.
20	10.07	32.31	20	24.87	309.7	0.63	0.06	1488.
30	8.44	32.72	30	25.44	255.2	0.92	0.14	1482.
50	7.45	33.21	50	25.97	205.4	1.37	0.32	1479.
75	7.00	33.59	75	26.34	170.9	1.83	0.61	1478.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	10.23	32.23	48.	7.52	33.20
2.	10.25	32.23	51.	7.41	33.21
7.	10.25	32.23	51.	7.35	33.19
11.	10.25	32.23	52.	7.34	33.26
11.	10.24	32.24	53.	7.33	33.27
12.	10.24	32.24	53.	7.33	33.28
14.	10.22	32.25	55.	7.32	33.29
17.	10.21	32.25	56.	7.27	33.33
18.	10.12	32.25	58.	7.25	33.36
19.	10.10	32.30	59.	7.22	33.40
21.	10.05	32.33	61.	7.21	33.43
22.	9.94	32.38	62.	7.18	33.45
24.	9.78	32.42	63.	7.17	33.47
25.	9.56	32.48	64.	7.10	33.50
26.	9.43	32.48	66.	7.08	33.53
27.	9.29	32.61	70.	7.02	33.58
29.	8.66	32.62	74.	7.01	33.59
29.	8.48	32.72	78.	6.97	33.61
31.	8.41	32.72	78.	6.96	33.61
31.	8.27	32.77	80.	6.91	33.63
33.	8.12	32.78	81.	6.91	33.65
34.	7.94	32.84	83.	6.90	33.66
37.	7.73	32.99	87.	6.86	33.68
39.	7.71	33.01	88.	6.86	33.69
41.	7.66	33.04	89.	6.85	33.69
43.	7.64	33.05	90.	6.90	33.72
43.	7.60	33.05	94.	6.79	33.73
44.	7.57	33.09	99.	6.78	33.74
45.	7.53	33.13			



OFFSHORE OCEANOGRAPHY GROUP

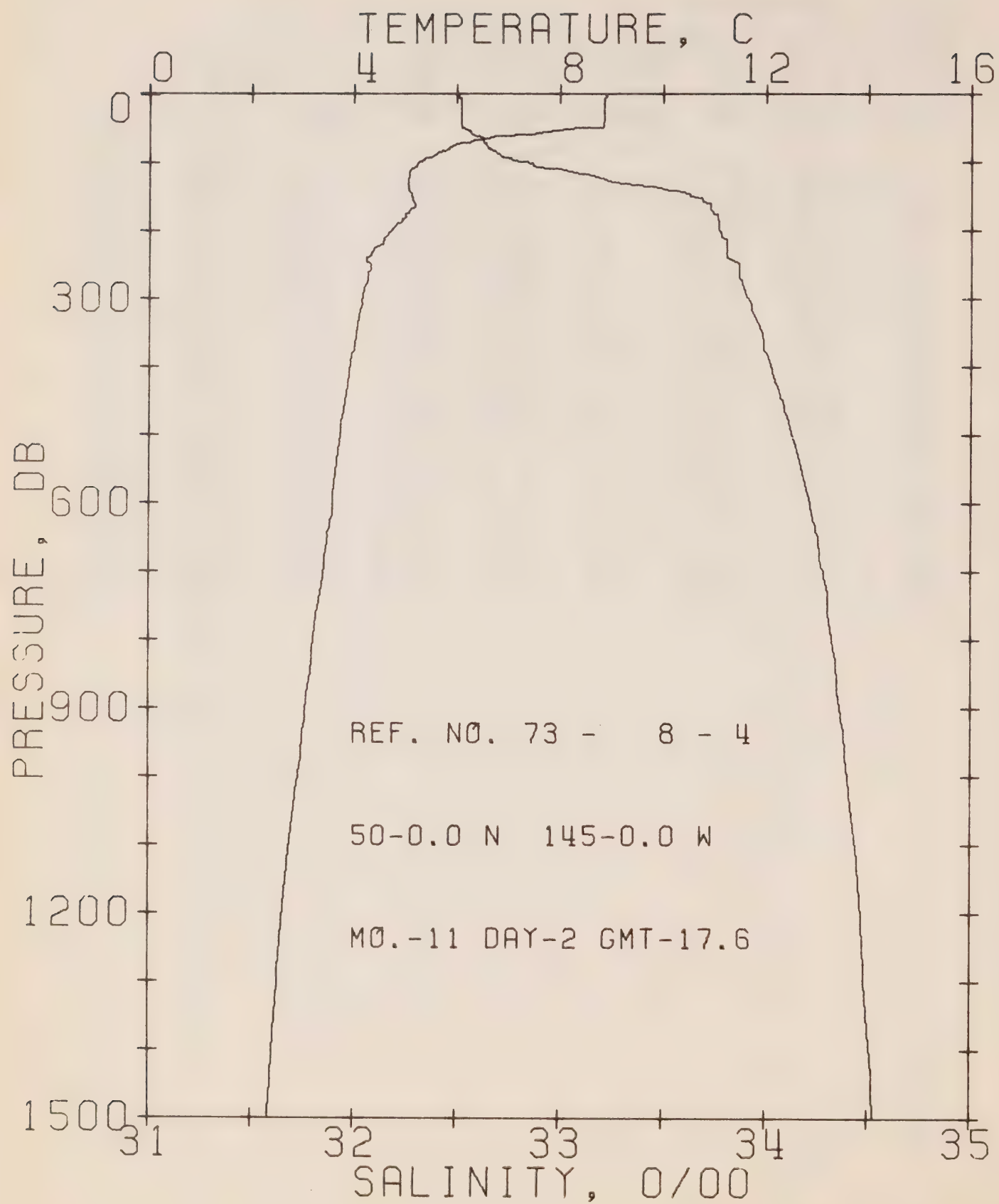
REFERENCE NO. 73- 8- 3

DATE 31/10/73

POSITION 50- 0.0N, 145- 0.0W GMT 21.2

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.82	32.49	0	25.21	277.0	0.0	0.0	1483.
10	8.82	32.49	10	25.21	277.3	0.28	0.01	1483.
20	8.82	32.49	20	25.21	277.3	0.55	0.06	1483.
30	8.82	32.49	30	25.21	277.4	0.83	0.13	1483.
50	8.82	32.50	50	25.21	277.4	1.39	0.35	1484.
75	6.52	32.57	75	25.59	241.3	2.05	0.77	1475.
100	5.42	32.70	99	25.83	218.6	2.62	1.29	1471.
125	5.06	33.03	124	26.13	190.6	3.14	1.87	1471.
150	4.92	33.44	149	26.47	158.4	3.57	2.48	1471.
175	4.97	33.70	174	26.68	139.4	3.94	3.09	1472.
200	5.02	33.79	199	26.74	133.8	4.28	3.74	1473.
225	4.68	33.80	223	26.79	129.5	4.61	4.46	1472.
250	4.51	33.83	248	26.83	125.7	4.93	5.23	1471.
300	4.25	33.89	298	26.90	118.8	5.54	6.93	1471.
400	4.00	34.01	397	27.02	108.4	6.68	10.98	1472.
500	3.81	34.11	496	27.12	99.6	7.72	15.75	1473.
600	3.62	34.19	595	27.21	91.9	8.68	21.11	1474.
800	3.26	34.30	793	27.33	81.6	10.40	33.34	1476.
1000	2.90	34.39	990	27.43	72.1	11.93	47.37	1478.
1200	2.62	34.45	1188	27.51	65.8	13.30	62.74	1480.



OFFSHORE OCEANOGRAPHY GROUP

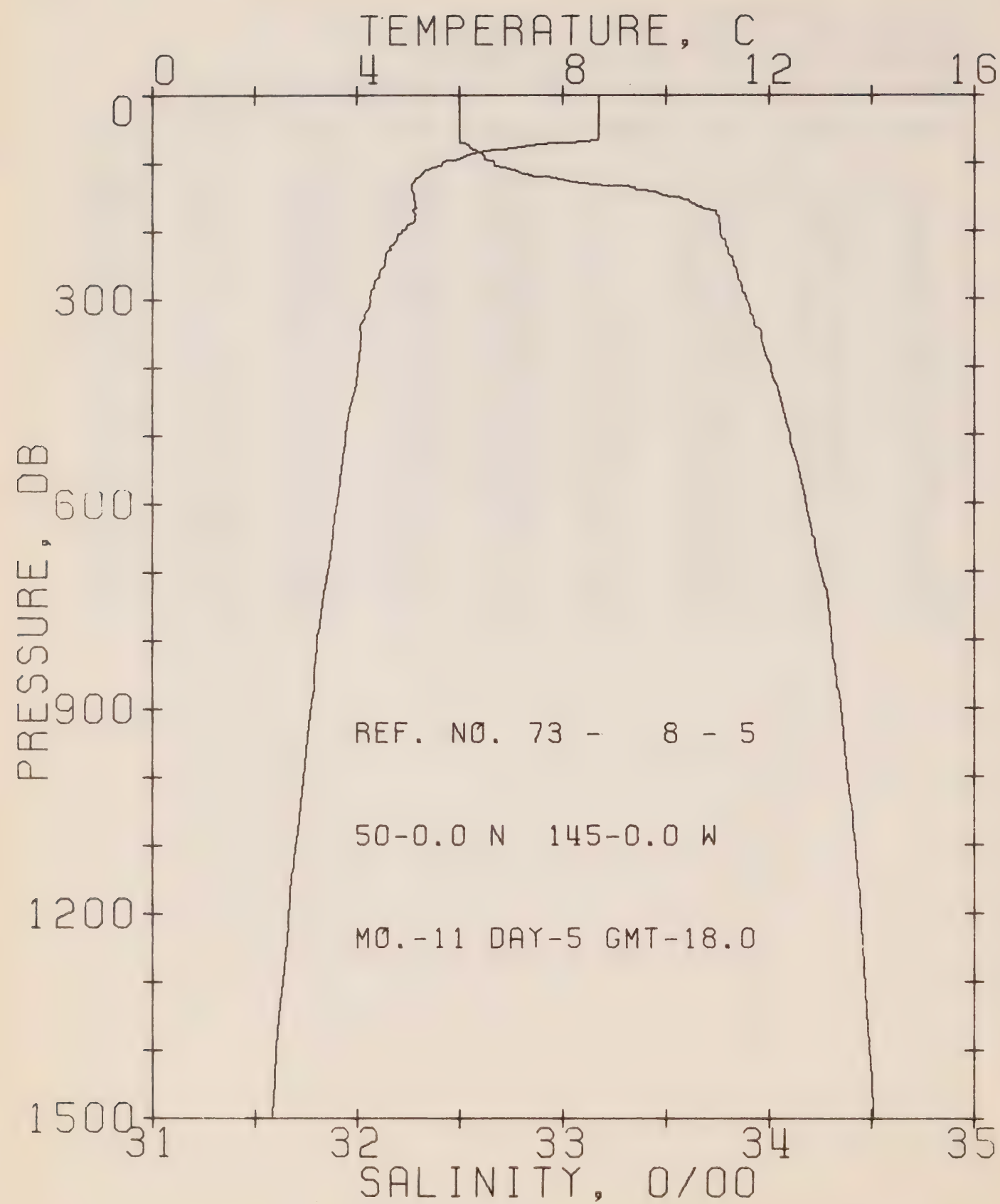
REFERENCE NO. 73- 8- 4

DATE 2/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 17.6

RESULTS OF STP CAST 191 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. FN	SOUND
0	9.06	32.51	0	25.19	279.1	0.0	0.0	1484.
10	8.85	32.52	10	25.23	275.6	0.28	0.01	1483.
20	8.85	32.52	20	25.23	275.7	0.55	0.06	1483.
30	8.85	32.52	30	25.23	275.9	0.83	0.13	1483.
50	8.80	32.52	50	25.23	275.5	1.38	0.35	1484.
75	5.98	32.64	75	25.72	229.4	2.00	0.74	1473.
100	5.30	32.80	99	25.92	210.0	2.55	1.23	1471.
125	5.05	33.21	124	26.27	177.0	3.03	1.79	1471.
150	5.13	33.63	149	26.60	146.6	3.43	2.35	1472.
175	5.07	33.74	174	26.69	137.8	3.79	2.93	1472.
200	4.74	33.77	199	26.75	132.2	4.12	3.57	1472.
225	4.44	33.81	223	26.82	126.2	4.44	4.27	1471.
250	4.30	33.87	248	26.88	120.4	4.75	5.02	1471.
300	4.16	33.91	298	26.93	116.2	5.35	6.69	1471.
400	3.91	34.02	397	27.04	106.2	6.46	10.64	1472.
500	3.73	34.12	496	27.14	97.6	7.47	15.29	1473.
600	3.56	34.21	595	27.23	89.9	8.41	20.52	1474.
800	3.19	34.32	793	27.35	79.2	10.09	32.50	1476.
1000	2.90	34.40	990	27.44	71.5	11.60	46.29	1478.
1200	2.61	34.47	1189	27.52	64.6	12.95	61.43	1480.



OFFSHORE OCEANOGRAPHY GROUP

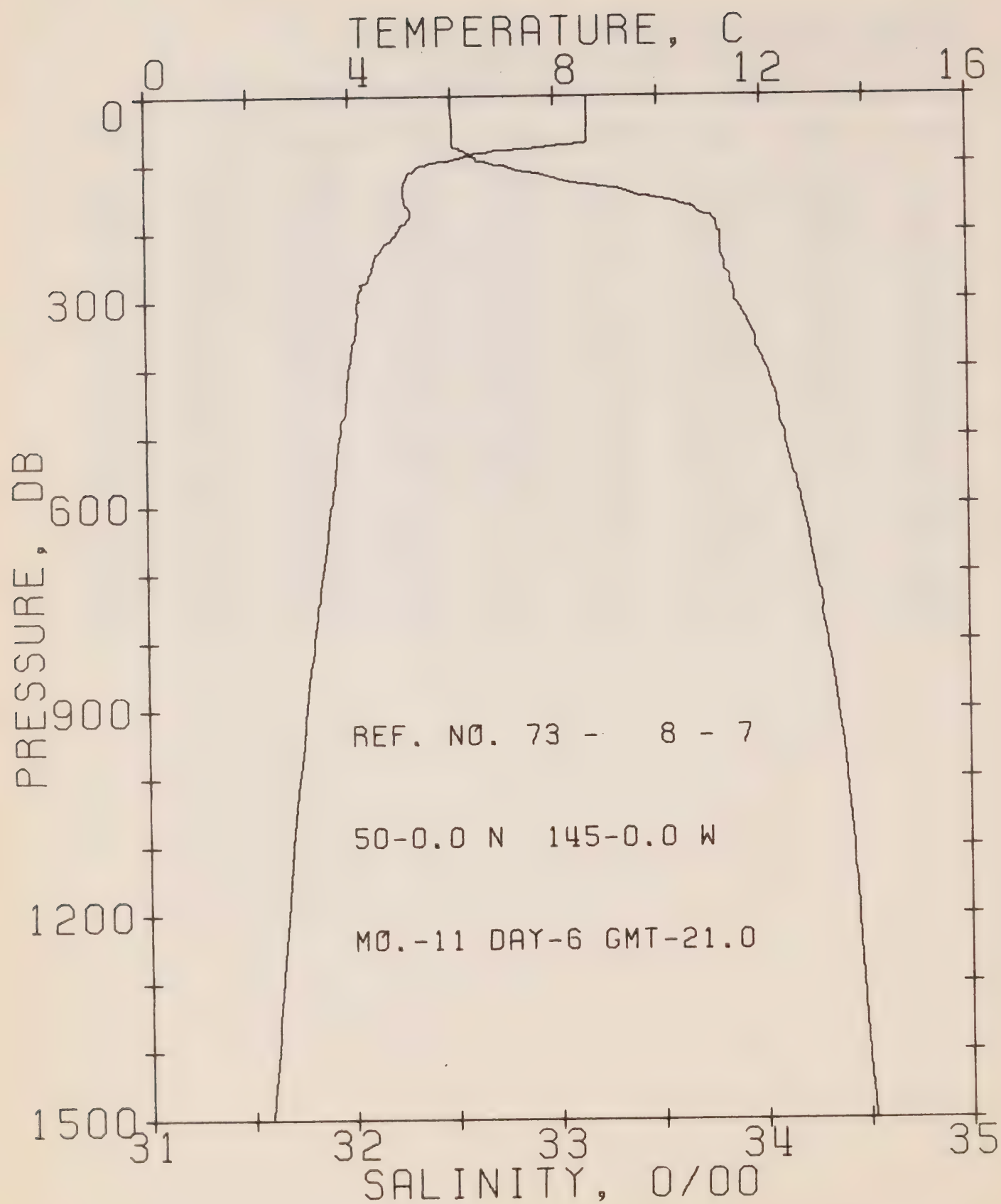
REFERENCE NO. 73- 8- 5

DATE 5/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 18.0

RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.68	32.50	0	25.24	274.2	0.0	0.0	1482.
10	8.68	32.50	10	25.24	274.7	0.27	0.01	1482.
20	8.68	32.50	20	25.24	274.8	0.55	0.06	1483.
30	8.69	32.50	30	25.24	275.0	0.82	0.13	1483.
50	8.69	32.50	50	25.23	275.4	1.37	0.35	1483.
75	7.26	32.55	75	25.48	252.2	2.05	0.78	1478.
100	5.65	32.67	99	25.78	223.7	2.64	1.31	1472.
125	5.11	33.00	124	26.11	192.9	3.17	1.91	1471.
150	5.12	33.50	149	26.50	155.7	3.60	2.51	1472.
175	5.15	33.74	174	26.68	138.8	3.97	3.11	1473.
200	4.87	33.76	199	26.73	134.4	4.31	3.76	1472.
225	4.63	33.80	223	26.79	129.2	4.64	4.48	1472.
250	4.51	33.83	248	26.83	125.7	4.96	5.25	1472.
300	4.26	33.89	298	26.90	118.9	5.57	6.96	1471.
400	3.99	34.01	397	27.02	108.2	6.70	10.99	1472.
500	3.77	34.10	496	27.12	95.8	7.74	15.76	1473.
600	3.59	34.18	595	27.20	92.7	8.70	21.15	1474.
800	3.20	34.30	793	27.33	81.0	10.43	33.41	1476.
1000	2.93	34.38	990	27.42	73.2	11.97	47.51	1478.
1200	2.65	34.45	1188	27.50	66.6	13.36	63.09	1480.



OFFSHORE OCEANOGRAPHY GROUP

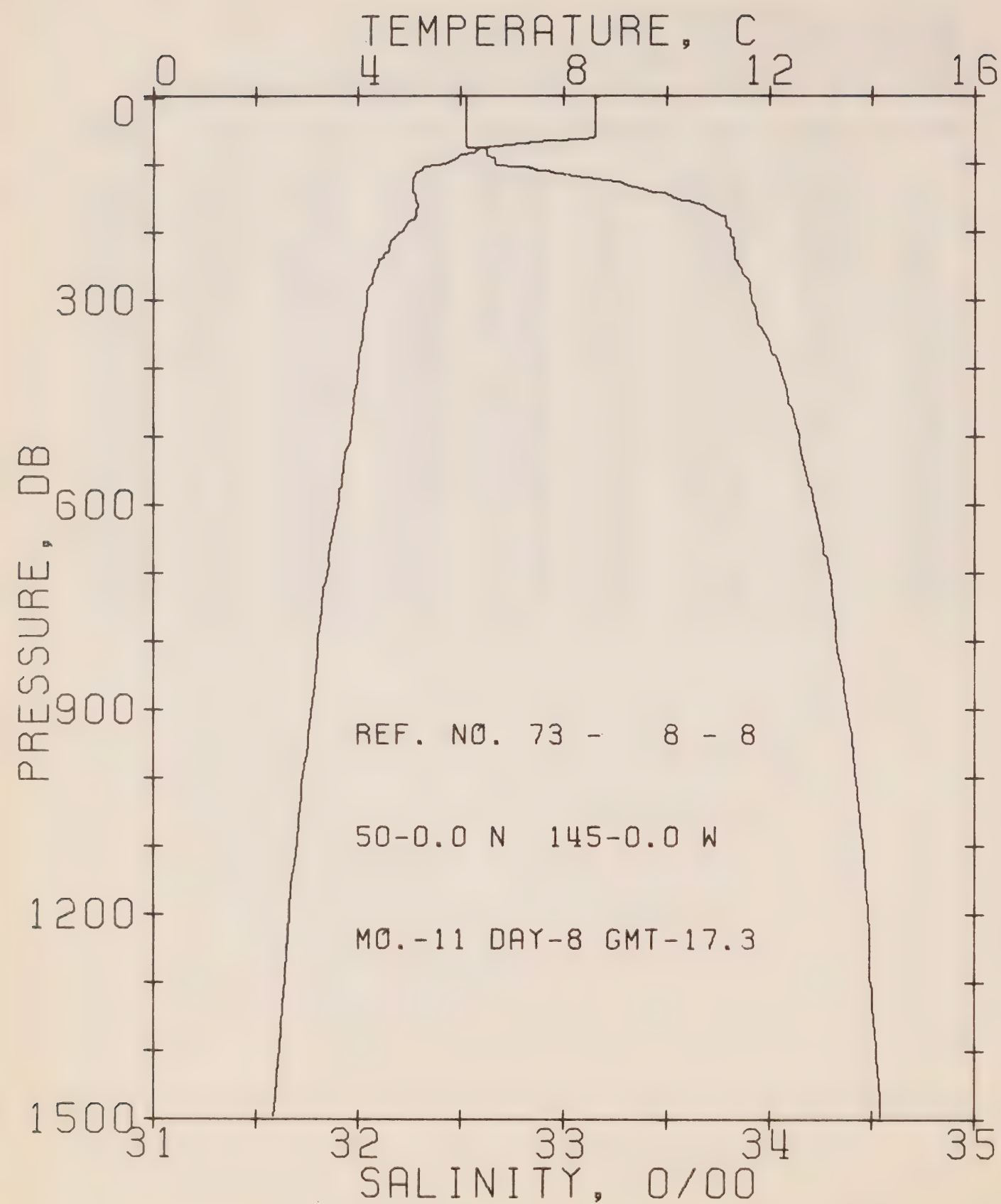
REFERENCE NO. 73- 8- 7

DATE 6/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 21.0

RESULTS OF STP CAST 157 FCINTS TAKEN FROM ANALCG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.63	32.50	0	25.24	273.5	0.0	0.0	1482.
10	8.63	32.50	10	25.24	273.8	0.27	0.01	1482.
20	8.63	32.50	20	25.25	273.8	0.55	0.06	1482.
30	8.63	32.50	30	25.25	273.9	0.82	0.13	1483.
50	8.64	32.51	50	25.25	274.0	1.37	0.35	1483.
75	7.77	32.52	75	25.39	261.3	2.05	0.78	1480.
100	5.52	32.70	99	25.82	220.0	2.65	1.31	1472.
125	5.08	33.04	124	26.14	189.6	3.16	1.90	1471.
150	5.08	33.46	149	26.47	158.7	3.59	2.50	1472.
175	5.20	33.72	174	26.66	140.8	3.96	3.11	1473.
200	4.93	33.79	199	26.75	132.8	4.30	3.75	1472.
225	4.61	33.80	223	26.79	128.8	4.62	4.46	1471.
250	4.44	33.82	248	26.83	125.6	4.94	5.23	1471.
300	4.18	33.87	298	26.89	119.6	5.55	6.94	1471.
400	3.96	34.02	397	27.04	106.9	6.68	10.95	1472.
500	3.76	34.11	496	27.13	98.9	7.71	15.67	1473.
600	3.60	34.18	595	27.20	92.4	8.67	21.03	1474.
800	3.23	34.31	793	27.34	80.5	10.39	33.27	1476.
1000	2.92	34.39	990	27.43	72.2	11.91	47.20	1478.
1200	2.67	34.45	1188	27.50	66.6	13.29	62.66	1480.



OFFSHORE OCEANOGRAPHY GROUP

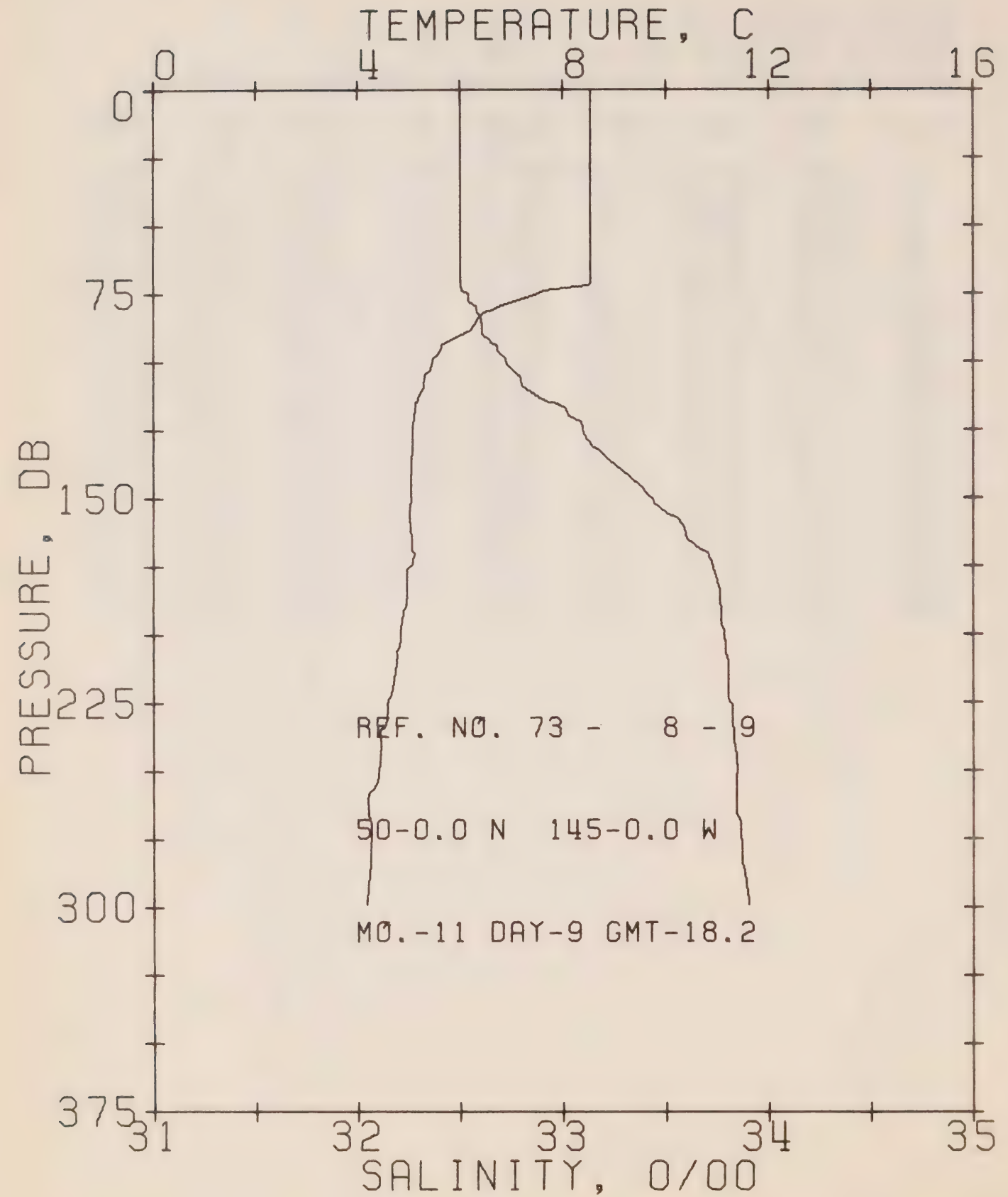
REFERENCE NO. 73- 8- 8

DATE 8/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 164 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.62	32.53	0	25.27	271.1	0.0	0.0	1482.
10	8.60	32.53	10	25.27	271.2	0.27	0.01	1482.
20	8.60	32.53	20	25.27	271.4	0.54	0.06	1482.
30	8.60	32.53	30	25.27	271.5	0.81	0.12	1482.
50	8.60	32.53	50	25.27	271.9	1.36	0.35	1493.
75	6.50	32.54	75	25.57	243.3	2.02	0.77	1475.
100	5.70	32.67	99	25.77	224.3	2.60	1.28	1472.
125	5.07	33.22	124	26.29	176.0	3.09	1.85	1471.
150	5.12	33.53	149	26.52	153.8	3.50	2.42	1472.
175	5.13	33.77	174	26.71	136.2	3.86	3.02	1473.
200	4.83	33.81	199	26.78	130.2	4.20	3.65	1472.
225	4.60	33.83	223	26.82	126.4	4.52	4.35	1471.
250	4.38	33.85	248	26.86	122.9	4.83	5.10	1471.
300	4.16	33.91	298	26.93	116.3	5.42	6.76	1471.
400	3.99	34.05	397	27.06	105.0	6.53	10.71	1472.
500	3.93	34.14	496	27.14	97.4	7.54	15.35	1473.
600	3.61	34.22	595	27.23	90.0	8.48	20.61	1474.
800	3.20	34.32	793	27.35	79.3	10.15	32.49	1476.
1000	2.91	34.42	990	27.45	70.3	11.65	46.15	1478.
1200	2.64	34.48	1188	27.53	63.8	12.98	61.12	1490.



OFFSHORE OCEANOGRAPHY GROUP

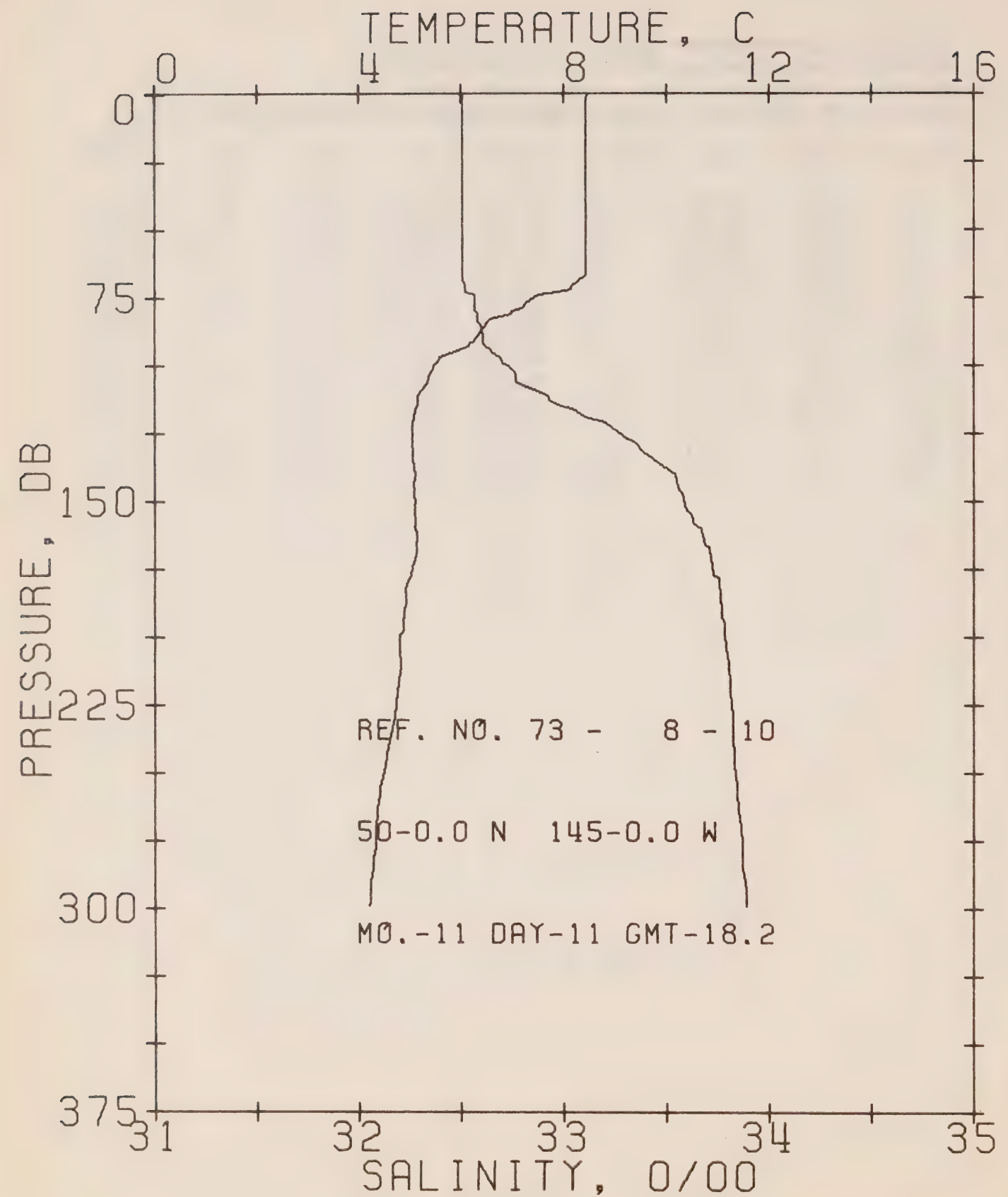
REFERENCE NO. 73- 8- 9

DATE 9/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 18.2

RESULTS OF STP CAST 91 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. FN	SOUND
0	8.54	32.50	0	25.26	272.2	0.0	0.0	1482.
10	8.54	32.50	10	25.26	272.6	0.27	0.01	1482.
20	8.54	32.50	20	25.26	272.7	0.55	0.06	1482.
30	8.54	32.50	30	25.26	272.9	0.82	0.13	1482.
50	8.54	32.50	50	25.26	273.2	1.36	0.35	1483.
75	7.51	32.54	75	25.44	256.3	2.04	0.78	1479.
100	5.47	32.72	99	25.84	217.9	2.63	1.30	1472.
125	5.06	33.10	124	26.19	185.4	3.13	1.88	1471.
150	5.04	33.43	149	26.45	160.7	3.57	2.49	1472.
175	5.02	33.72	174	26.69	138.3	3.94	3.10	1472.
200	4.83	33.78	199	26.75	132.5	4.28	3.74	1472.
225	4.56	33.81	223	26.81	127.4	4.60	4.45	1471.
250	4.41	33.85	248	26.85	123.3	4.92	5.21	1471.



OFFSHORE OCEANOGRAPHY GROUP

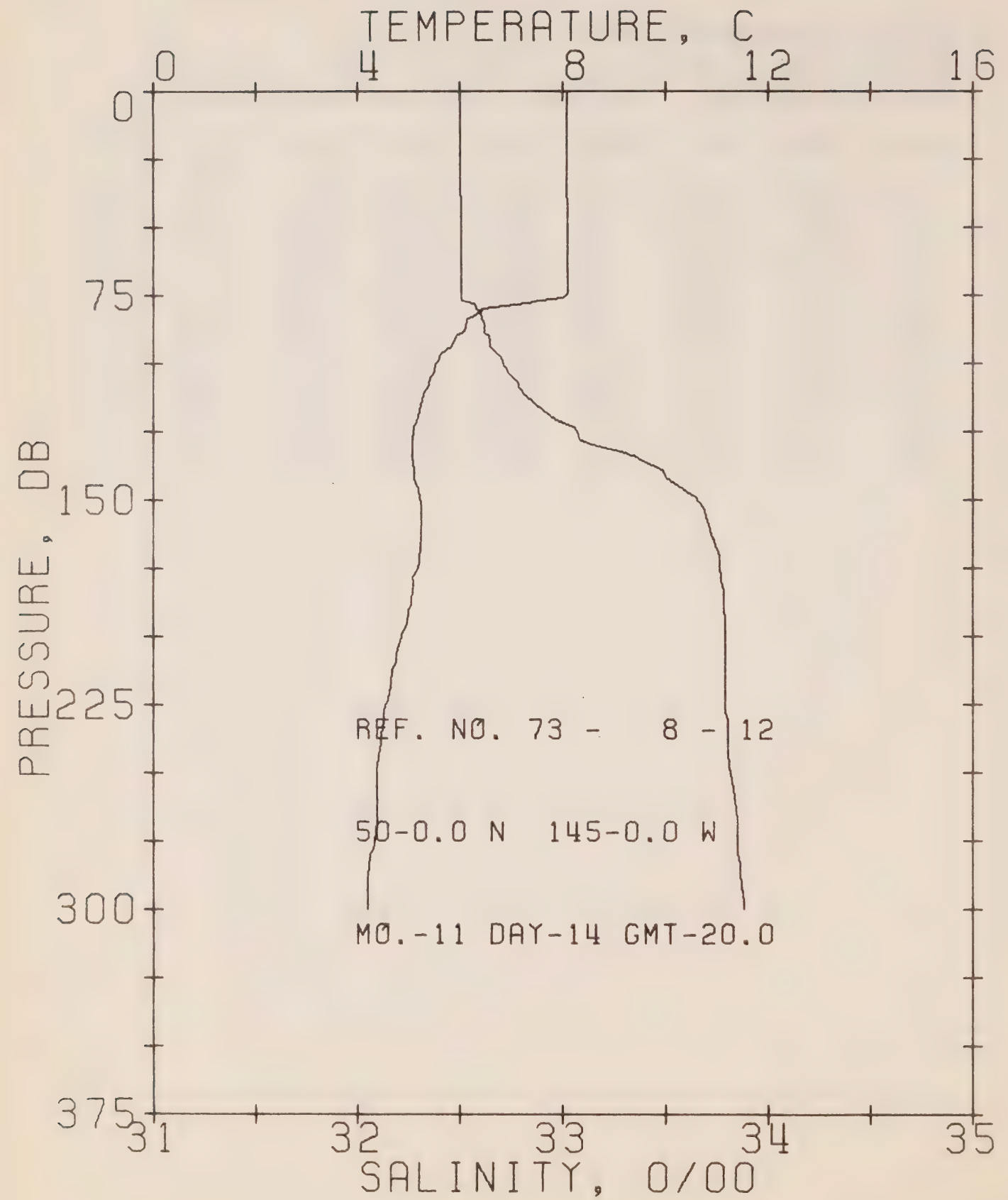
REFERENCE NO. 73- 8- 10

DATE 11/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 18.2

RESULTS OF STP CAST 96 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.45	32.51	0	25.28	270.2	0.0	0.0	1481.
10	8.42	32.51	10	25.28	270.1	0.27	0.01	1431.
20	8.42	32.51	20	25.28	270.3	0.54	0.06	1482.
30	8.42	32.51	30	25.28	270.4	0.81	0.12	1482.
50	8.42	32.51	50	25.28	270.8	1.35	0.34	1482.
75	7.41	32.57	75	25.48	252.7	2.02	0.77	1479.
100	5.46	32.73	99	25.85	217.0	2.62	1.30	1472.
125	5.05	33.27	124	26.33	172.2	3.11	1.86	1471.
150	5.11	33.58	149	26.57	149.7	3.50	2.41	1472.
175	5.03	33.72	174	26.69	138.6	3.86	3.01	1472.
200	4.80	33.78	199	26.76	131.9	4.20	3.65	1472.
225	4.72	33.82	223	26.79	128.8	4.53	4.36	1472.
250	4.47	33.83	248	26.83	124.9	4.84	5.12	1471.



OFFSHORE OCEANOGRAPHY GROUP

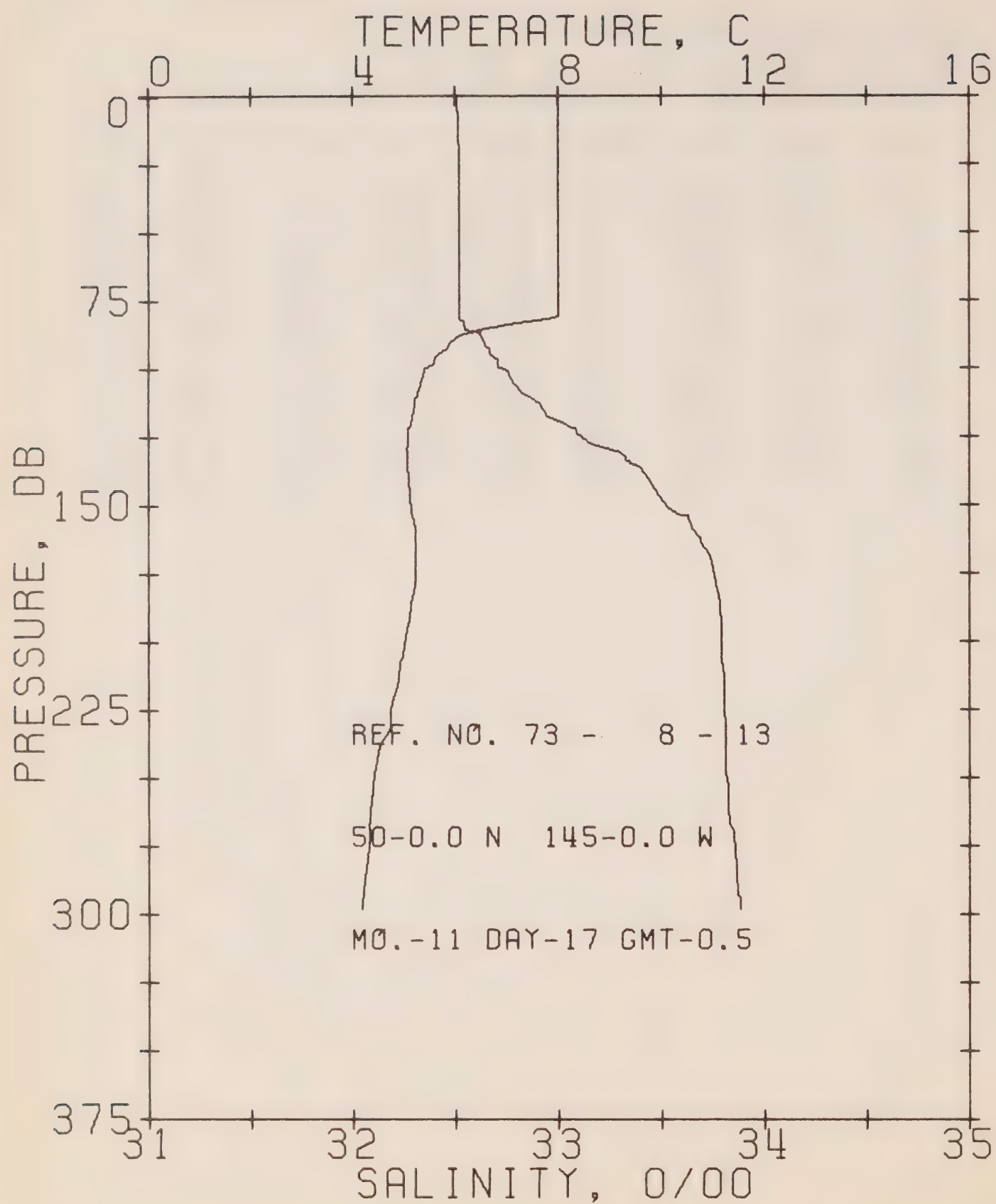
REFERENCE NO. 73- 8- 12

DATE 14/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 20.0

RESULTS OF STP CAST 86 POINTS TAKEN FROM ANALCG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.09	32.50	0	25.32	265.8	0.0	0.0	1480.
10	8.08	32.50	10	25.33	266.0	0.27	0.01	1480.
20	8.08	32.50	20	25.33	266.1	0.53	0.05	1480.
30	8.09	32.50	30	25.33	266.2	0.80	0.12	1480.
50	8.09	32.51	50	25.33	266.4	1.33	0.34	1481.
75	8.05	32.51	75	25.34	266.0	2.00	0.76	1481.
100	5.51	32.71	99	25.83	219.1	2.58	1.28	1472.
125	5.09	33.06	124	26.16	188.1	3.10	1.87	1471.
150	5.23	33.65	149	26.60	146.1	3.51	2.45	1473.
175	5.17	33.76	174	26.70	137.4	3.86	3.03	1473.
200	4.35	33.79	199	26.76	131.9	4.20	3.67	1472.
225	4.54	33.79	223	26.79	128.8	4.52	4.38	1471.
250	4.37	33.81	248	26.83	125.3	4.84	5.15	1471.
300	4.19	33.88	298	26.90	119.0	5.45	6.86	1471.



OFFSHORE OCEANOGRAPHY GROUP

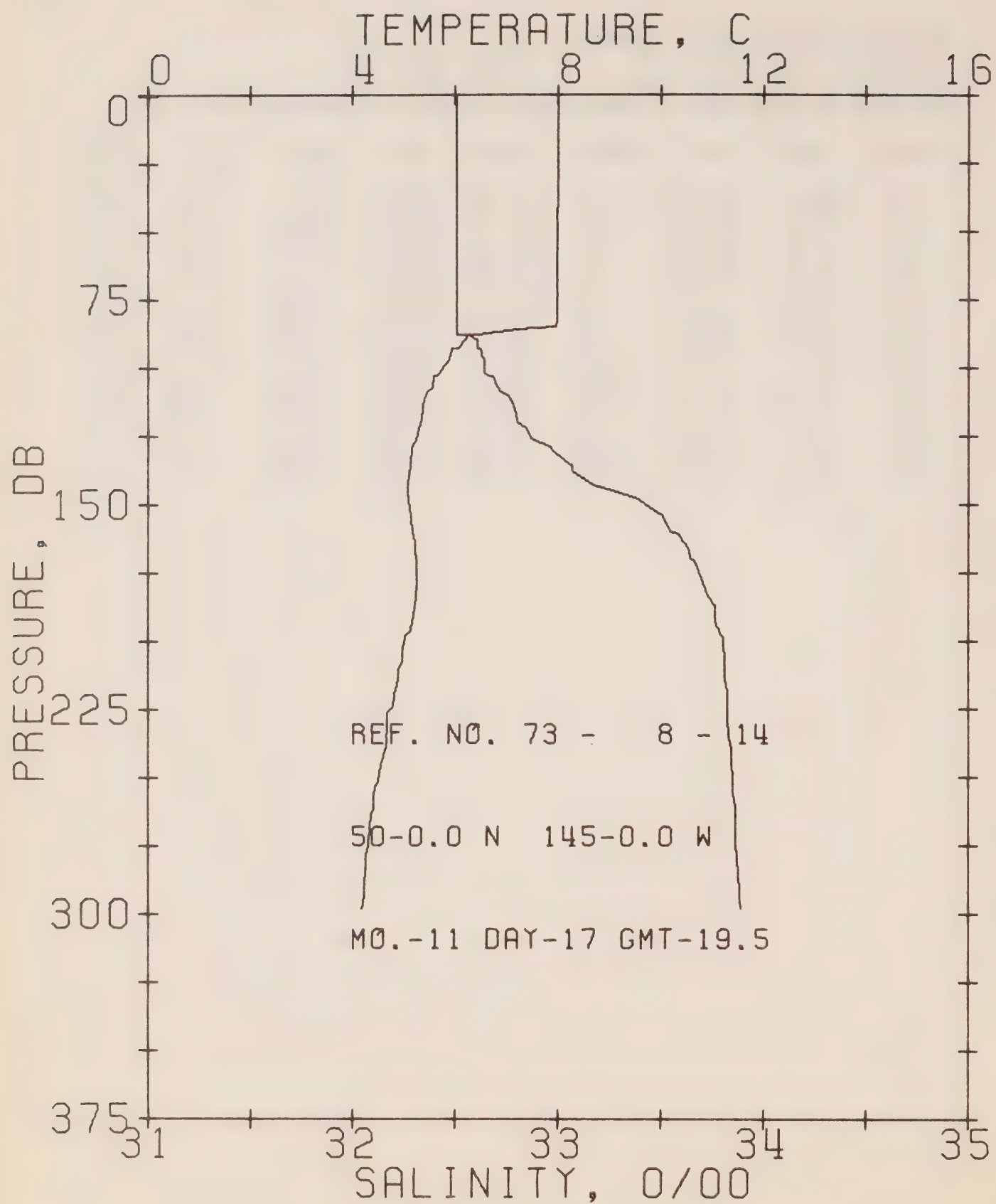
REFERENCE NO. 73- 8- 13

DATE 17/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 0.5

RESULTS OF STP CAST 86 FCINTS TAKEN FROM ANALCG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.00	32.51	0	25.35	263.9	0.0	0.0	1480.
10	8.00	32.51	10	25.35	263.9	0.26	0.01	1480.
20	8.00	32.52	20	25.35	263.7	0.53	0.05	1480.
30	8.00	32.52	30	25.35	263.8	0.79	0.12	1480.
50	8.00	32.52	50	25.35	264.0	1.32	0.34	1480.
75	7.99	32.52	75	25.35	264.4	1.98	0.76	1481.
100	5.43	32.71	99	25.84	218.2	2.58	1.29	1471.
125	5.07	33.11	124	26.19	184.7	3.09	1.87	1471.
150	5.13	33.52	149	26.51	154.7	3.50	2.45	1472.
175	5.22	33.75	174	26.68	139.0	3.86	3.04	1473.
200	4.99	33.79	199	26.74	133.5	4.20	3.69	1473.
225	4.71	33.80	223	26.78	129.9	4.53	4.41	1472.
250	4.39	33.81	248	26.83	125.6	4.85	5.18	1471.



OFFSHORE OCEANOGRAPHY GROUP

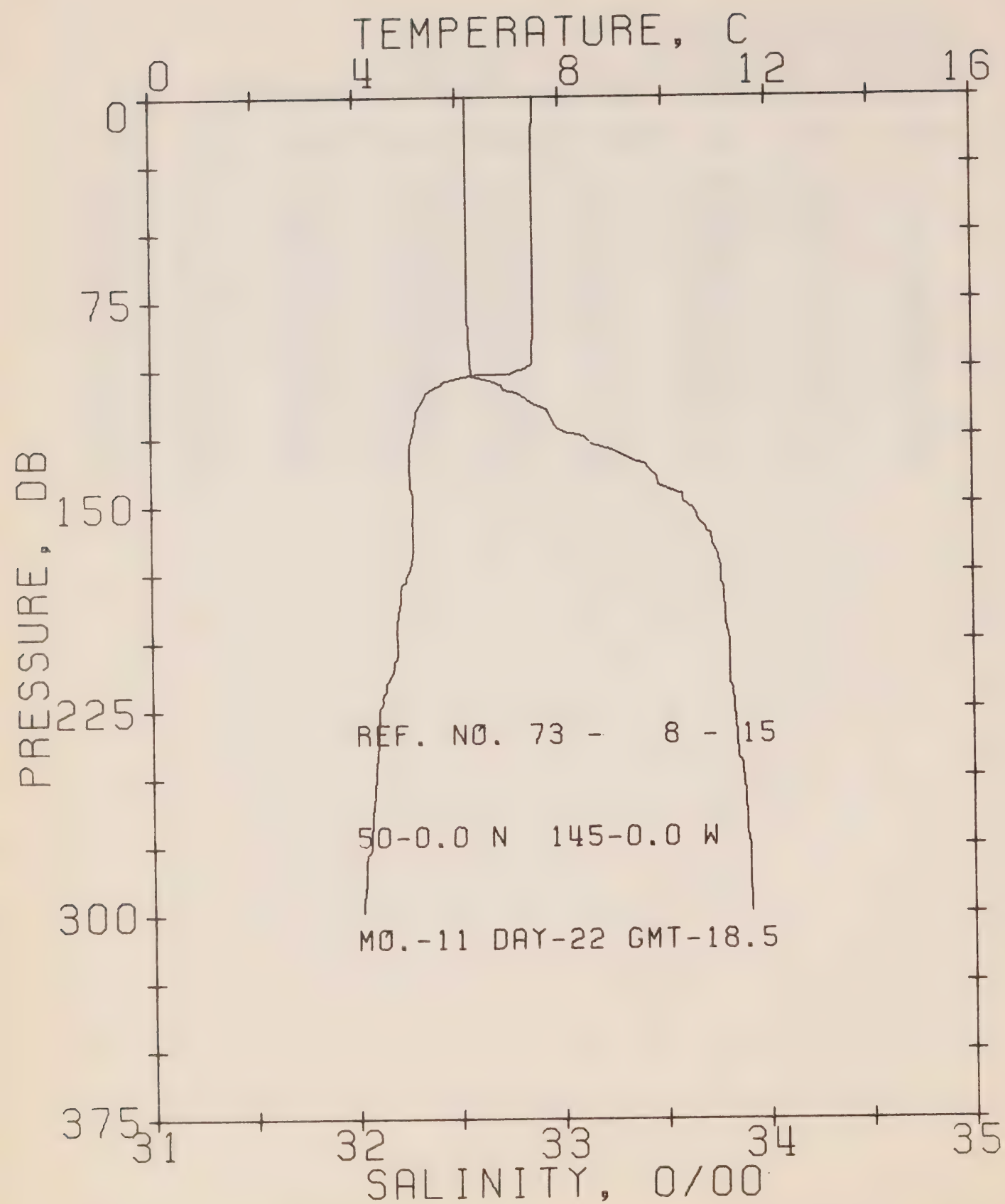
REFERENCE NO. 73- 8- 14

DATE 17/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 19.5

RESULTS OF STP CAST 81 PCINTS TAKEN FROM ANALCG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.99	32.51	0	25.35	263.8	0.0	0.0	1480.
10	7.99	32.51	10	25.35	264.1	0.26	0.01	1480.
20	7.99	32.51	20	25.35	264.2	0.53	0.05	1480.
30	7.99	32.51	30	25.35	264.3	0.79	0.12	1480.
50	7.98	32.51	50	25.35	264.6	1.32	0.34	1480.
75	7.98	32.51	75	25.35	264.9	1.98	0.76	1481.
100	5.75	32.64	99	25.75	227.0	2.60	1.31	1473.
125	5.24	32.86	124	25.98	204.9	3.14	1.92	1471.
150	5.12	33.42	149	26.44	161.9	3.60	2.57	1472.
175	5.24	33.68	174	26.63	144.2	3.98	3.20	1473.
200	5.00	33.80	199	26.75	132.8	4.33	3.86	1473.
225	4.72	33.82	223	26.80	128.4	4.66	4.57	1472.
250	4.50	33.85	248	26.84	124.1	4.97	5.33	1471.



OFFSHORE OCEANOGRAPHY GROUP

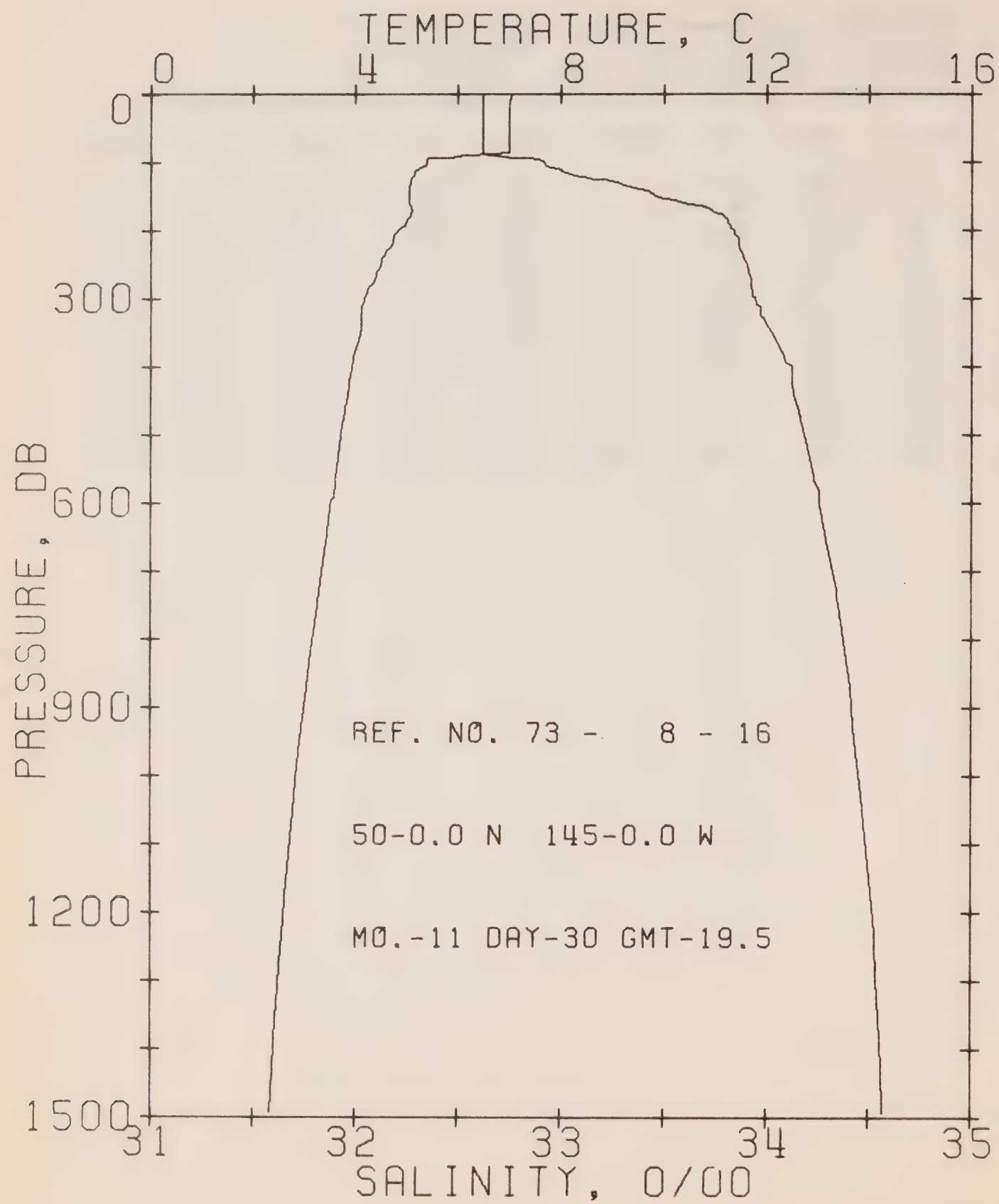
REFERENCE NO. 73- 8- 15

DATE 22/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 18.5

RESULTS OF STP CAST 86 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.48	32.55	0	25.45	253.9	0.0	0.0	1478.
10	7.47	32.55	10	25.45	254.1	0.25	0.01	1478.
20	7.47	32.55	20	25.45	254.2	0.51	0.05	1478.
30	7.47	32.55	30	25.45	254.3	0.76	0.12	1478.
50	7.46	32.55	50	25.45	254.6	1.27	0.32	1478.
75	7.46	32.55	75	25.45	254.9	1.91	0.73	1479.
100	7.31	32.56	99	25.48	252.5	2.54	1.30	1479.
125	5.07	33.11	124	26.20	184.5	3.07	1.90	1471.
150	5.11	33.61	149	26.59	147.8	3.48	2.47	1472.
175	4.99	33.77	174	26.73	134.7	3.83	3.05	1472.
200	4.80	33.81	199	26.78	129.8	4.16	3.68	1472.
225	4.42	33.83	223	26.84	124.4	4.48	4.37	1471.
250	4.34	33.87	248	26.88	120.5	4.79	5.11	1471.



OFFSHORE OCEANOGRAPHY GROUP

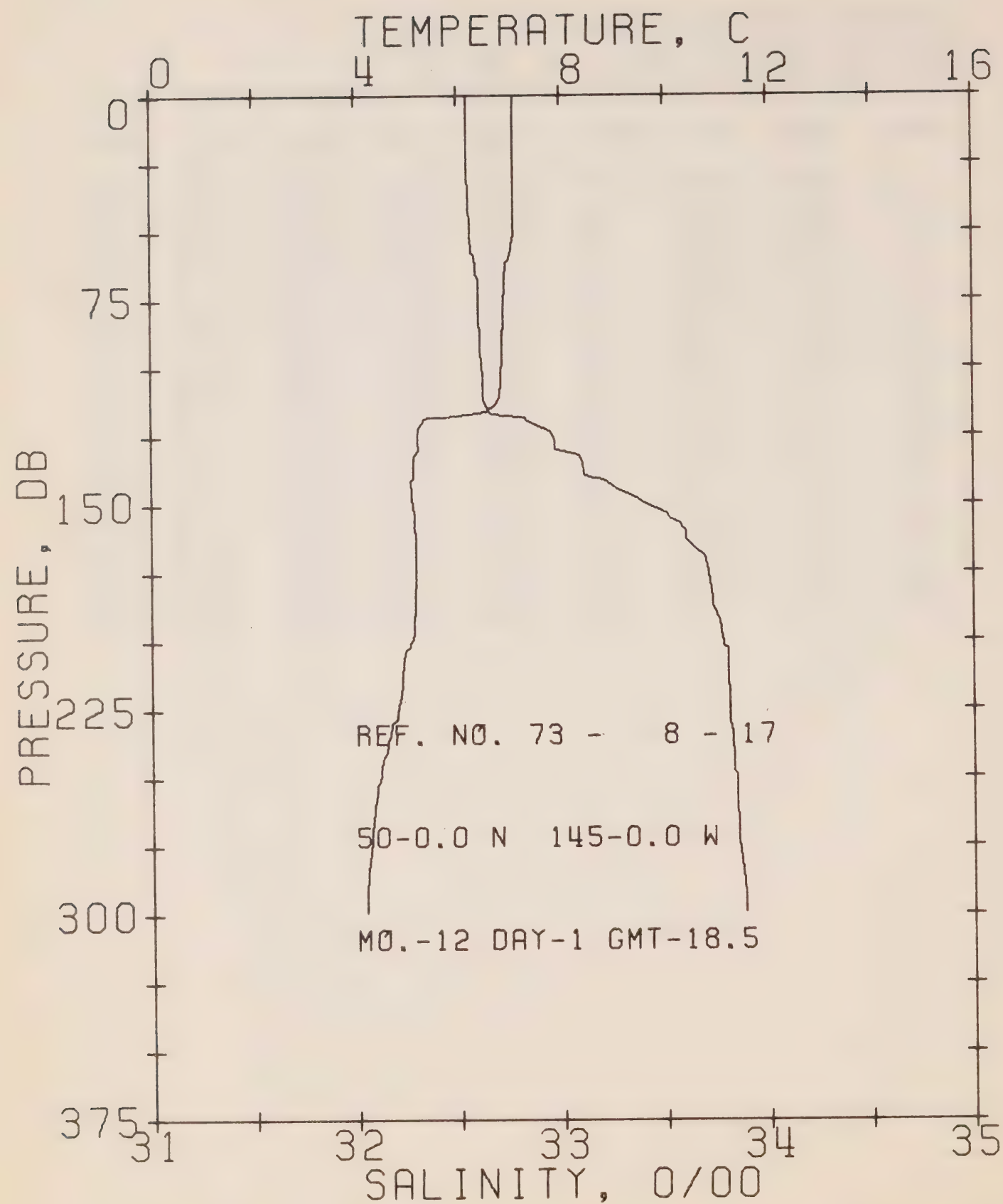
REFERENCE NO. 73- 8- 16

DATE 30/11/73

POSITION 50- 0.0N, 145- 0.0W GMT 19.5

RESULTS OF STP CAST 122 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.04	32.62	0	25.57	242.9	0.0	0.0	1476.
10	6.98	32.62	10	25.57	242.5	0.24	0.01	1476.
20	6.98	32.62	20	25.57	242.7	0.49	0.05	1476.
30	6.98	32.62	30	25.57	242.8	0.73	0.11	1476.
50	6.98	32.62	50	25.57	243.0	1.21	0.31	1477.
75	6.98	32.62	75	25.57	243.4	1.82	0.70	1477.
100	5.38	32.91	99	26.01	202.4	2.40	1.21	1471.
125	5.07	33.16	124	26.24	180.7	2.89	1.77	1471.
150	5.04	33.46	149	26.48	158.2	3.30	2.35	1472.
175	5.06	33.75	174	26.71	136.6	3.67	2.95	1472.
200	4.83	33.84	199	26.80	127.9	4.00	3.59	1472.
225	4.66	33.86	223	26.84	124.8	4.31	4.27	1472.
250	4.48	33.89	248	26.88	120.4	4.62	5.01	1471.
300	4.16	33.94	298	26.95	114.1	5.21	6.65	1471.
400	3.92	34.12	397	27.12	99.0	6.28	10.47	1472.
500	3.70	34.18	496	27.19	93.1	7.25	14.90	1473.
600	3.51	34.25	595	27.26	86.5	8.14	19.92	1474.
800	3.14	34.37	793	27.40	74.9	9.75	31.34	1475.
1000	2.83	34.45	990	27.48	67.3	11.17	44.31	1478.
1200	2.60	34.52	1188	27.56	60.7	12.45	58.61	1480.



OFFSHORE OCEANOGRAPHY GROUP

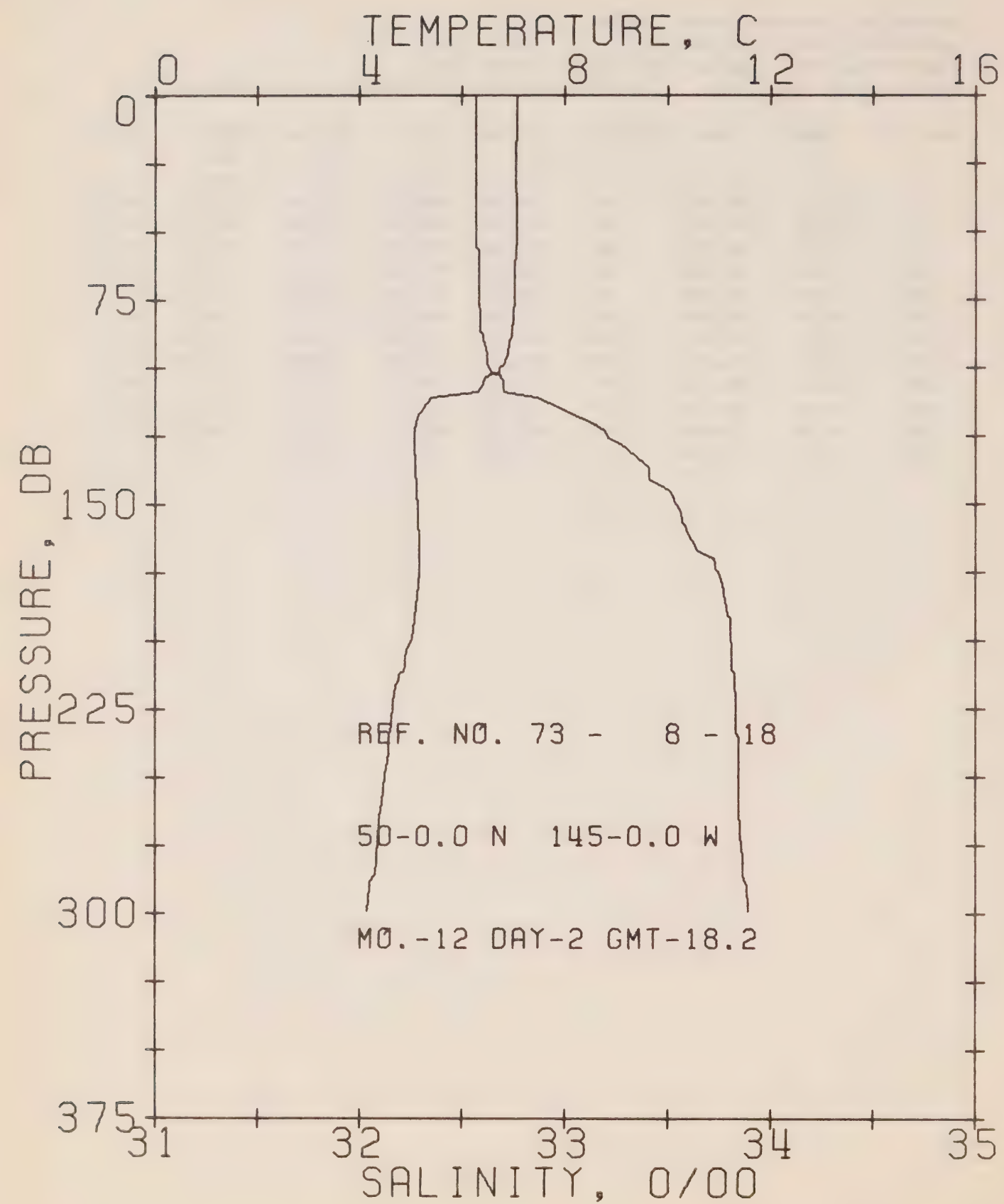
REFERENCE NO. 73- 8- 17

DATE 1/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 18.5

RESULTS OF STP CAST 83 PCINTS TAKEN FROM ANALOGG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.10	32.55	0	25.50	248.9	0.0	0.0	1476.
10	7.10	32.55	10	25.50	249.2	0.25	0.01	1476.
20	7.10	32.55	20	25.50	249.4	0.50	0.05	1477.
30	7.10	32.55	30	25.50	249.4	0.75	0.11	1477.
50	7.10	32.56	50	25.51	249.0	1.25	0.32	1477.
75	6.88	32.60	75	25.57	243.6	1.86	0.71	1477.
100	6.34	32.62	99	25.59	242.2	2.47	1.25	1477.
125	5.21	32.95	124	26.06	157.8	3.04	1.90	1471.
150	5.11	33.41	149	26.43	162.8	3.50	2.54	1472.
175	5.17	33.71	174	26.66	141.2	3.87	3.16	1473.
200	5.06	33.78	199	26.72	135.1	4.22	3.82	1473.
225	4.78	33.81	223	26.78	129.9	4.55	4.53	1472.
250	4.43	33.84	248	26.84	124.1	4.86	5.30	1471.



OFFSHORE OCEANOGRAPHY GROUP

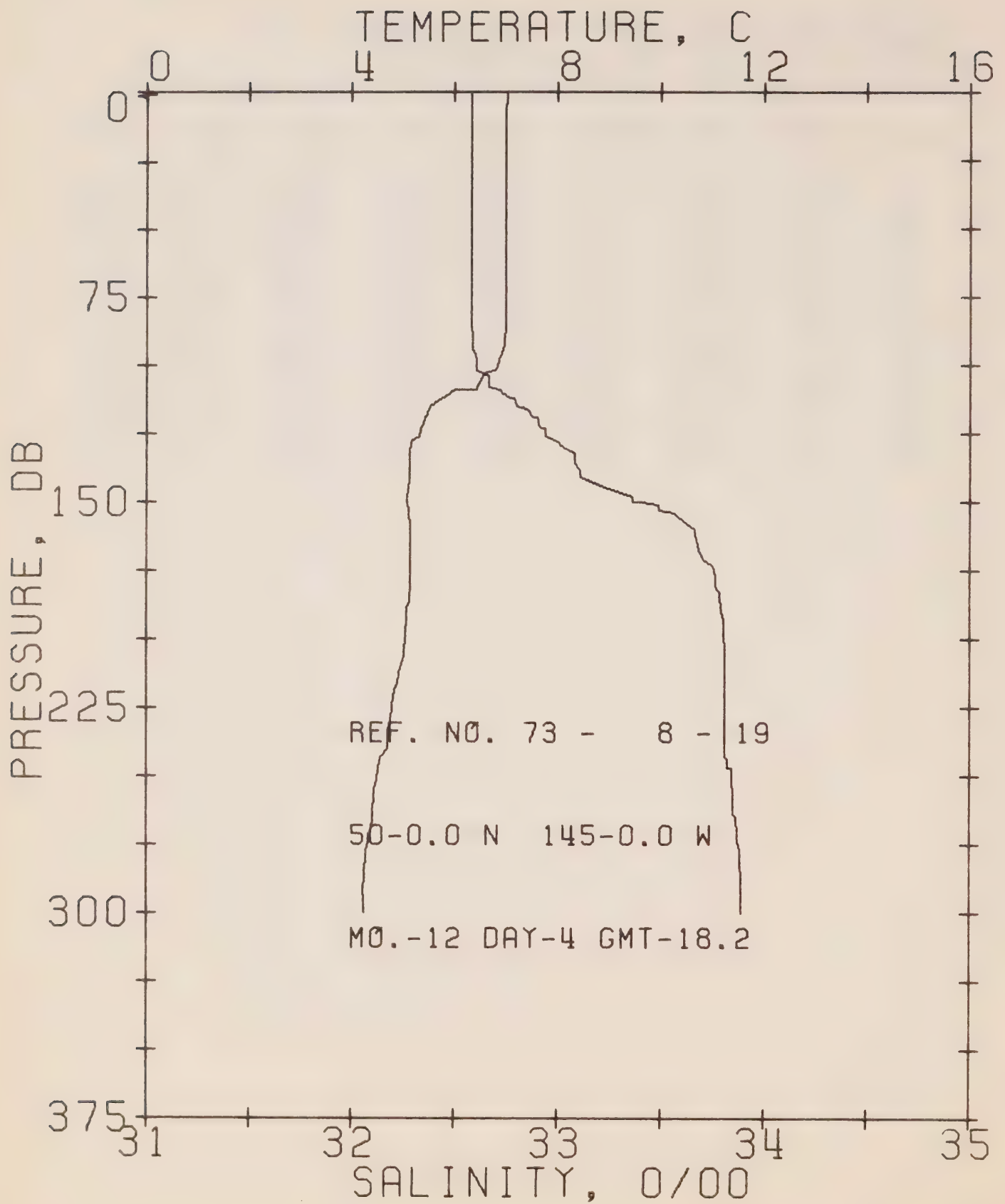
REFERENCE NO. 73- 8- 18

DATE 2/12/73

POSITION 50- 0.0N. 145- 0.0W GMT 18.2

RESULTS OF STP CAST 89 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.08	32.57	0	25.52	247.2	0.0	0.0	1476.
10	7.08	32.57	10	25.52	247.4	0.25	0.01	1476.
20	7.05	32.57	20	25.52	247.3	0.49	0.05	1476.
30	7.05	32.57	30	25.52	247.4	0.74	0.11	1477.
50	7.06	32.57	50	25.52	247.8	1.24	0.32	1477.
75	7.00	32.58	75	25.54	246.6	1.85	0.71	1477.
100	6.73	32.63	99	25.61	239.8	2.47	1.25	1476.
125	5.08	33.20	124	26.27	177.6	2.98	1.84	1471.
150	5.14	33.54	149	26.53	153.6	3.39	2.42	1472.
175	5.17	33.74	174	26.68	138.9	3.76	3.03	1473.
200	4.99	33.80	199	26.75	132.6	4.10	3.67	1473.
225	4.63	33.83	223	26.81	126.7	4.42	4.37	1472.
250	4.48	33.84	248	26.84	124.7	4.74	5.13	1471.



OFFSHORE OCEANOGRAPHY GROUP

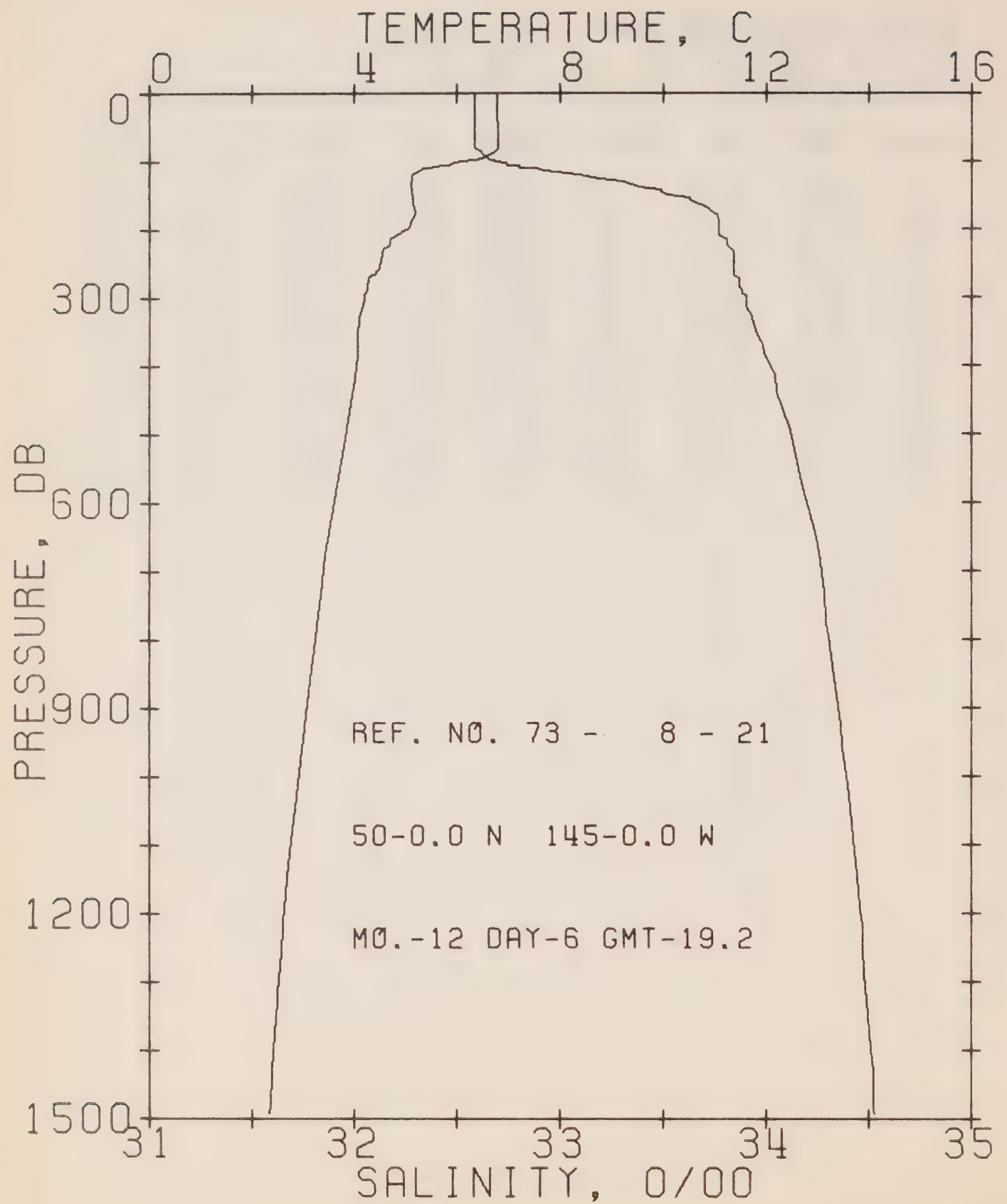
REFERENCE NO. 73- 8- 19

DATE 4/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 18.2

RESULTS OF STP CAST 96 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.02	32.58	0	25.54	245.6	0.0	0.0	1476.
10	6.98	32.58	10	25.54	245.5	0.25	0.01	1476.
20	6.98	32.58	20	25.54	245.6	0.49	0.05	1476.
30	6.98	32.58	30	25.54	245.8	0.74	0.11	1476.
50	6.99	32.58	50	25.54	246.1	1.23	0.31	1477.
75	6.99	32.58	75	25.54	246.5	1.84	0.71	1477.
100	6.83	32.61	99	25.59	242.5	2.46	1.25	1477.
125	5.31	32.94	124	26.03	199.9	3.01	1.88	1472.
150	5.08	33.36	149	26.39	166.1	3.47	2.52	1472.
175	5.16	33.75	174	26.69	138.1	3.83	3.13	1473.
200	5.03	33.80	199	26.75	132.9	4.17	3.77	1473.
225	4.77	33.81	223	26.78	129.7	4.50	4.48	1472.
250	4.48	33.84	248	26.84	124.7	4.82	5.26	1471.
300	4.23	33.89	298	26.90	118.6	5.42	6.95	1471.



OFFSHORE OCEANOGRAPHY GROUP

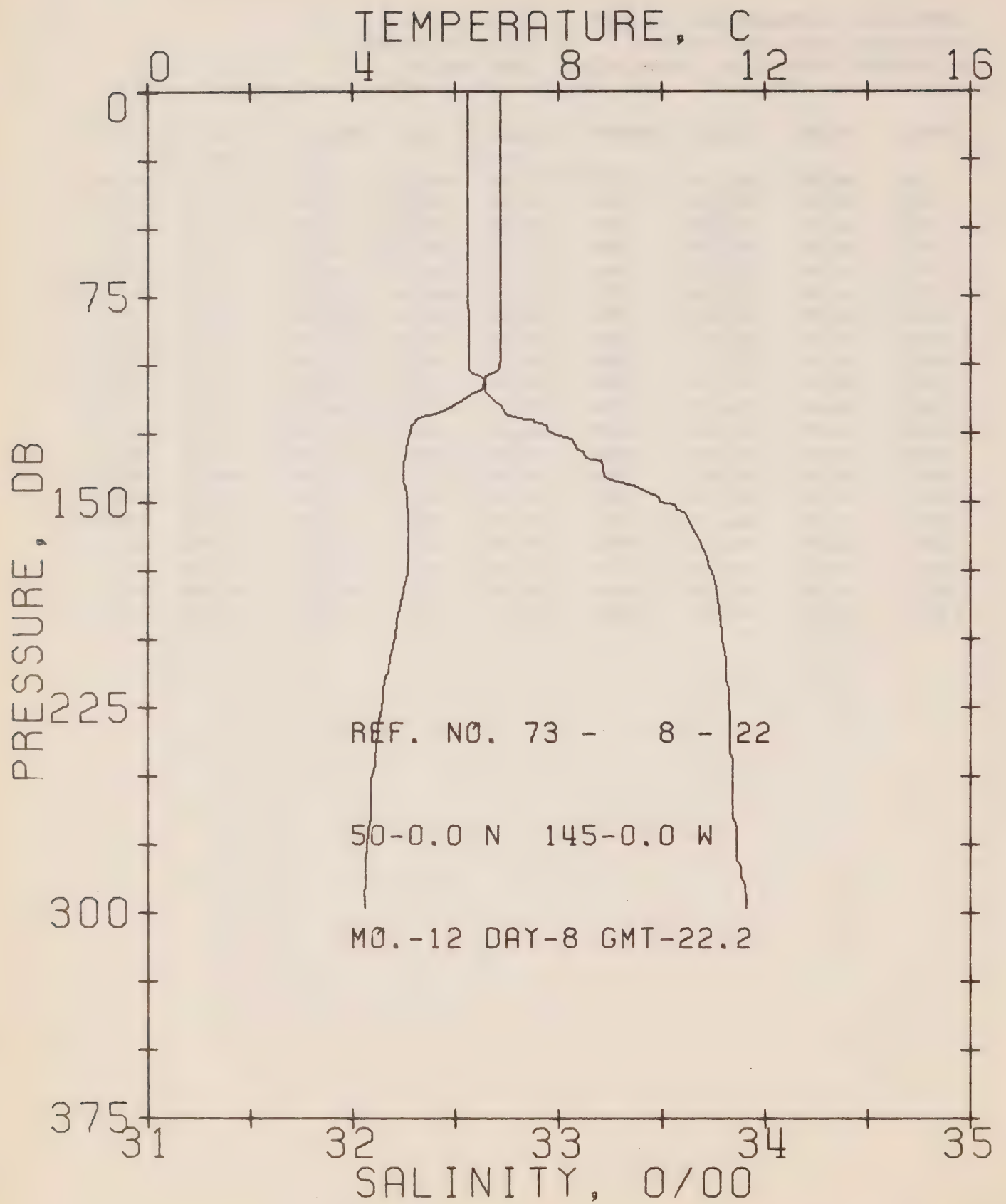
REFERENCE NO. 73- 8- 21

DATE 6/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 19.2

RESULTS OF STP CAST 85 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.78	32.59	0	25.58	241.9	0.0	0.0	1475.
10	6.78	32.59	10	25.58	242.3	0.24	0.01	1475.
20	6.79	32.59	20	25.58	242.5	0.48	0.05	1475.
30	6.79	32.59	30	25.57	242.6	0.73	0.11	1476.
50	6.80	32.59	50	25.57	242.9	1.21	0.31	1476.
75	6.81	32.59	75	25.57	243.4	1.82	0.70	1476.
100	6.20	32.68	99	25.72	229.5	2.42	1.23	1474.
125	5.11	33.17	124	26.24	180.5	2.93	1.81	1471.
150	5.14	33.51	149	26.51	155.5	3.34	2.39	1472.
175	5.18	33.73	174	26.67	139.8	3.71	2.99	1473.
200	5.01	33.77	199	26.72	135.2	4.05	3.64	1473.
225	4.63	33.81	223	26.80	128.1	4.38	4.35	1472.
250	4.49	33.84	248	26.84	124.7	4.69	5.11	1471.
300	4.19	33.90	298	26.92	117.5	5.30	6.81	1471.
400	4.02	34.02	397	27.03	107.9	6.42	10.83	1472.
500	3.82	34.12	496	27.13	98.9	7.46	15.56	1473.
600	3.59	34.19	595	27.21	91.6	8.41	20.90	1474.
800	3.22	34.30	793	27.33	81.1	10.12	33.05	1476.
1000	2.89	34.39	990	27.43	72.4	11.65	47.05	1478.
1200	2.61	34.46	1188	27.51	65.4	13.03	62.44	1480.



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REFERENCE NO. 73- 8- 22

DATE 8/12/73

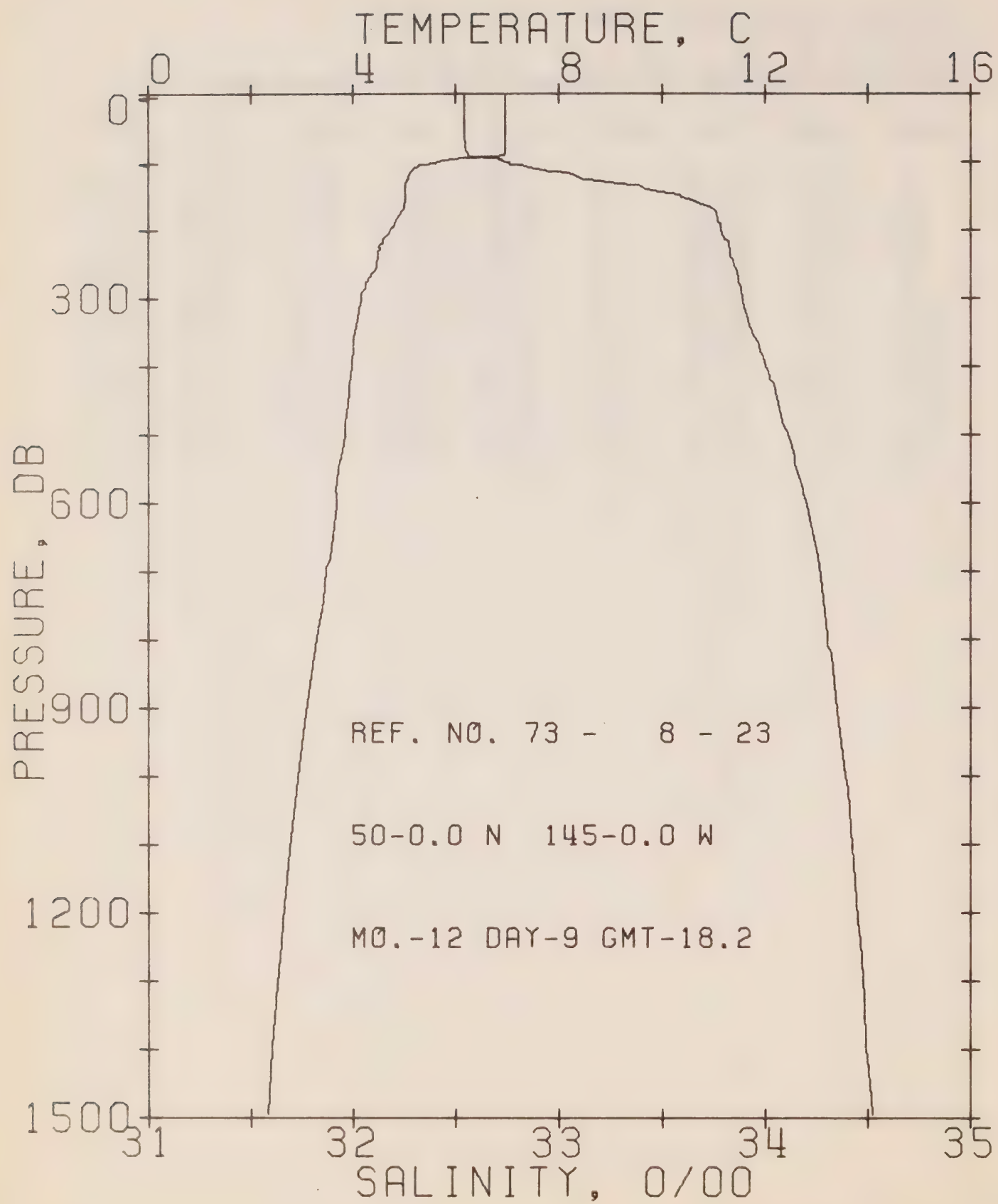
POSITION 50- 0.0N, 145- 0.0W

GMT 22.2

RESULTS OF STP CAST

78 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA C	POT. EN	SOUND
0	6.87	32.56	0	25.54	245.3	0.0	0.0	1475.
10	6.87	32.56	10	25.54	245.6	0.25	0.01	1475.
20	6.87	32.56	20	25.54	245.7	0.49	0.05	1476.
30	6.87	32.56	30	25.54	245.9	0.74	0.11	1476.
50	6.87	32.56	50	25.54	246.1	1.23	0.31	1476.
75	6.87	32.56	75	25.54	246.2	1.84	0.71	1477.
100	6.85	32.57	99	25.55	245.9	2.46	1.25	1477.
125	5.11	32.97	124	26.08	195.0	3.02	1.90	1471.
150	5.07	33.49	149	26.50	156.2	3.46	2.51	1472.
175	5.06	33.73	174	26.69	138.1	3.82	3.10	1472.
200	4.81	33.79	199	26.76	131.5	4.16	3.75	1472.
225	4.55	33.82	223	26.82	126.6	4.48	4.44	1471.
250	4.37	33.84	248	26.85	123.3	4.79	5.20	1471.



OFFSHORE OCEANOGRAPHY GROUP

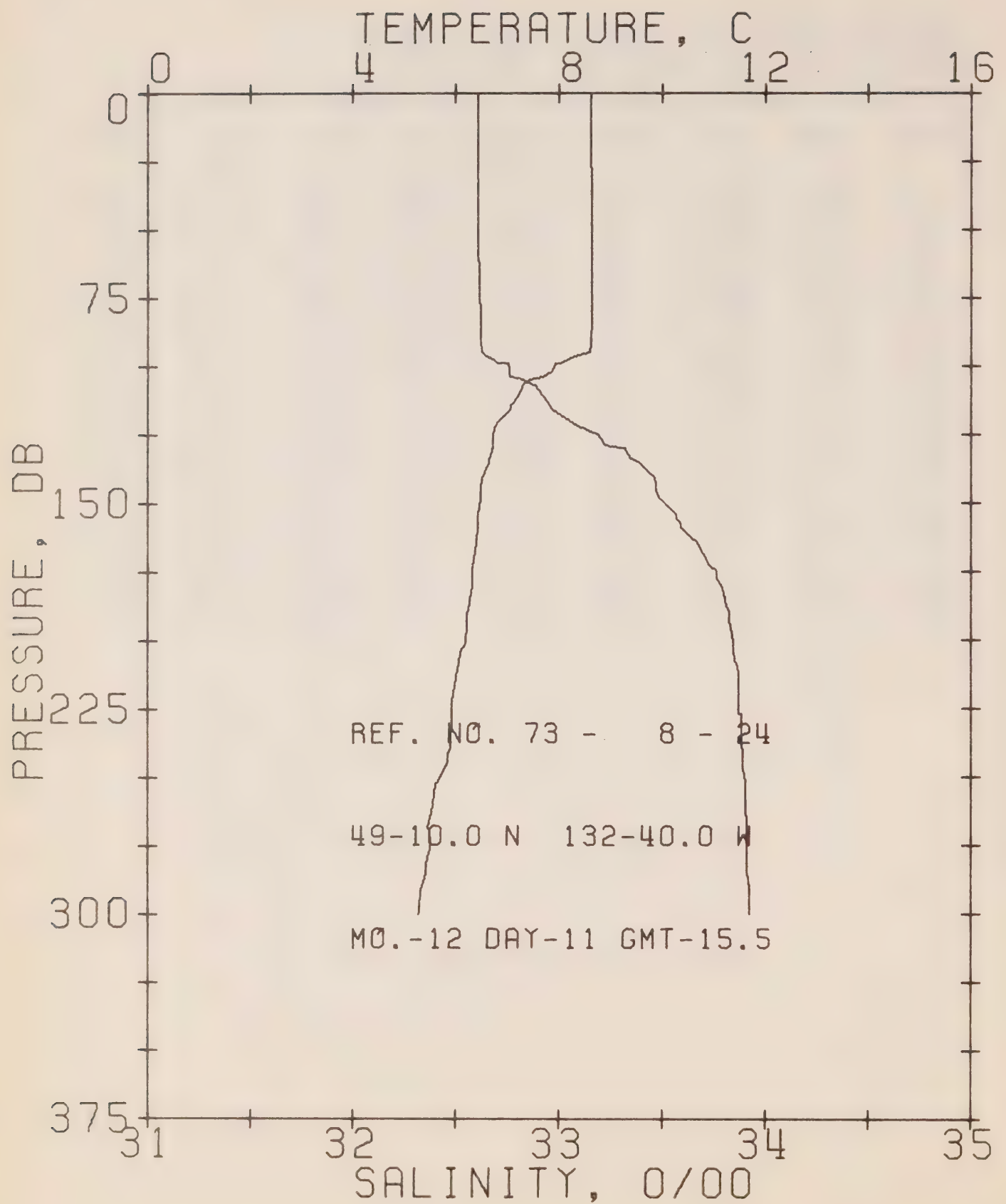
REFERENCE NO. 73- 8- 23

DATE 9/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 18.2

RESULTS OF STP CAST 121 FCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.97	32.54	0	25.51	248.0	0.0	0.0	1476.
10	6.97	32.54	10	25.51	248.3	0.25	0.01	1476.
20	6.96	32.54	20	25.51	248.4	0.50	0.05	1476.
30	6.96	32.54	30	25.51	248.5	0.74	0.11	1476.
50	6.96	32.54	50	25.51	248.8	1.24	0.32	1476.
75	6.96	32.55	75	25.52	248.5	1.86	0.71	1477.
100	5.64	32.74	99	25.84	218.3	2.47	1.25	1472.
125	5.06	33.12	124	26.20	183.6	2.56	1.82	1471.
150	5.01	33.59	149	26.58	148.1	3.37	2.39	1472.
175	4.92	33.76	174	26.73	134.7	3.73	2.97	1472.
200	4.72	33.78	199	26.76	131.2	4.06	3.61	1471.
225	4.51	33.82	223	26.82	126.2	4.38	4.30	1471.
250	4.45	33.85	248	26.85	123.8	4.69	5.06	1471.
300	4.16	33.89	298	26.91	117.9	5.29	6.75	1471.
400	3.97	34.00	397	27.02	108.4	6.43	10.78	1472.
500	3.83	34.11	496	27.12	99.6	7.47	15.54	1473.
600	3.67	34.19	595	27.20	92.4	8.43	20.91	1474.
800	3.28	34.30	793	27.33	81.8	10.16	33.22	1476.
1000	2.92	34.39	990	27.43	72.6	11.69	47.28	1478.
1200	2.64	34.45	1188	27.50	66.4	13.08	62.79	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- 8- 24

DATE 11/12/73

POSITION 49-10.0N, 132-40.0W GMT 15.5

RESULTS OF STP CAST 84 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.62	32.61	0	25.33	265.2	0.0	0.0	1482.
10	8.63	32.61	10	25.33	265.7	0.27	0.01	1482.
20	8.63	32.61	20	25.33	265.8	0.53	0.05	1483.
30	8.64	32.61	30	25.33	266.1	0.80	0.12	1483.
50	8.65	32.61	50	25.33	266.6	1.33	0.34	1483.
75	8.64	32.62	75	25.33	266.4	2.00	0.76	1483.
100	7.89	32.75	99	25.55	246.0	2.66	1.35	1481.
125	6.73	33.19	124	26.05	198.3	3.21	1.99	1478.
150	6.46	33.51	149	26.34	171.6	3.67	2.63	1477.
175	6.32	33.76	174	26.56	151.2	4.07	3.29	1478.
200	6.18	33.84	199	26.64	144.1	4.44	4.00	1478.
225	5.93	33.87	223	26.69	138.8	4.79	4.76	1477.
250	5.68	33.90	248	26.74	134.1	5.14	5.59	1476.
300	5.26	33.92	298	26.81	127.9	5.79	7.42	1476.

SURFACE TEMPERATURE AND SALINITY OBSERVATIONS

(P-73-8)

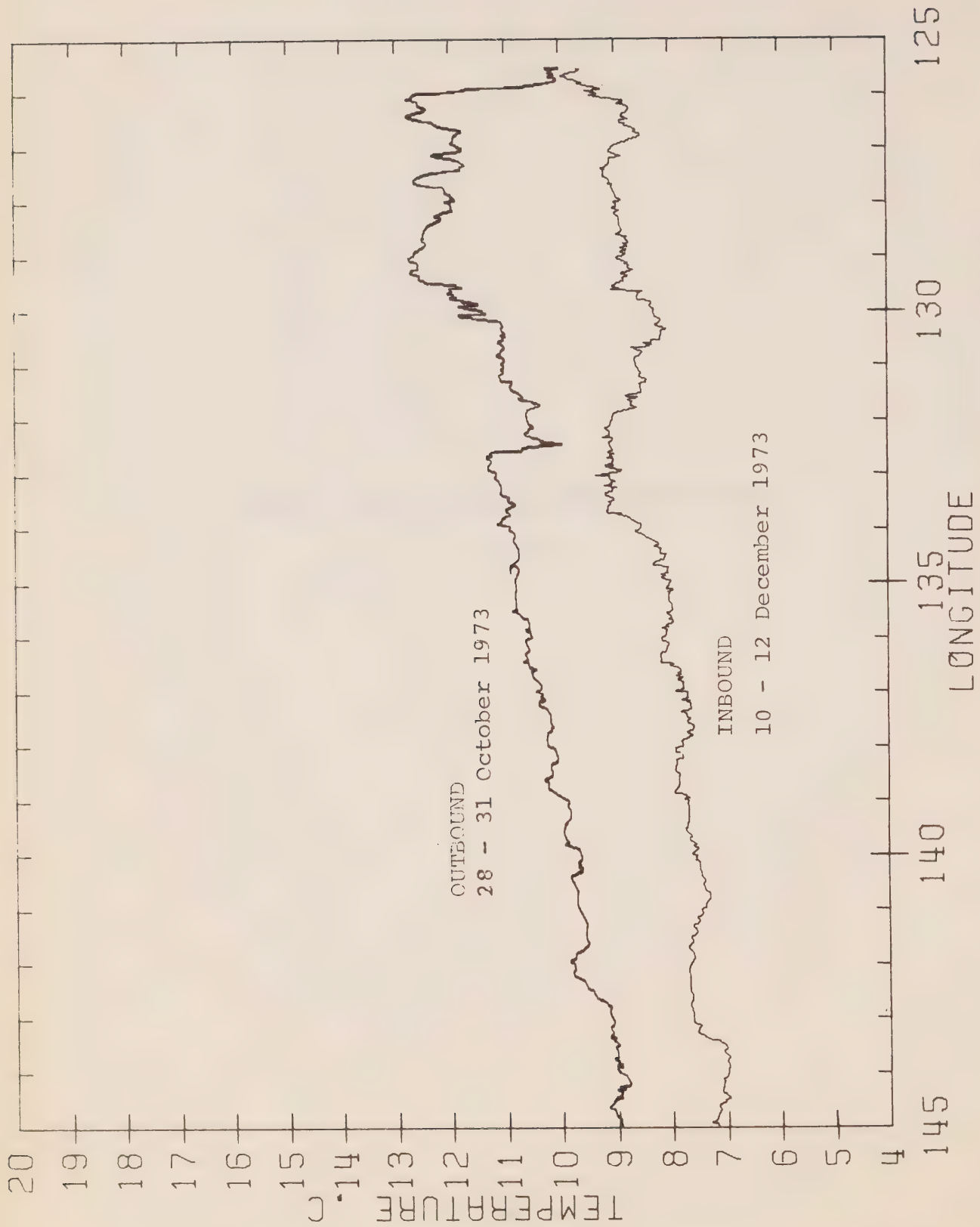


Figure 12 Surface temperature along Line P recorded from engine room intake. P-73-8.

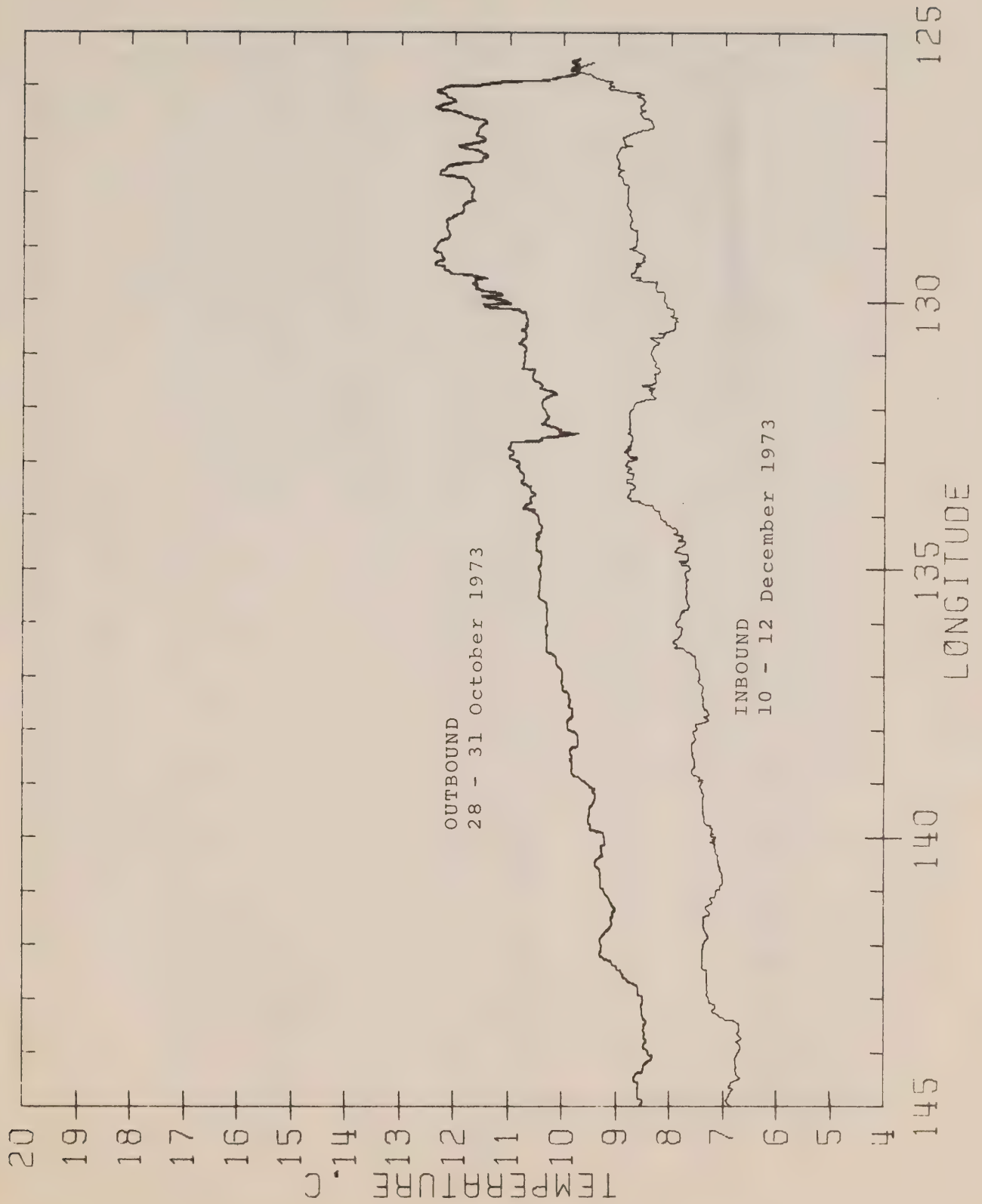


Figure 13 Surface temperature along Line P recorded from thermosalinograph. P-73-8.

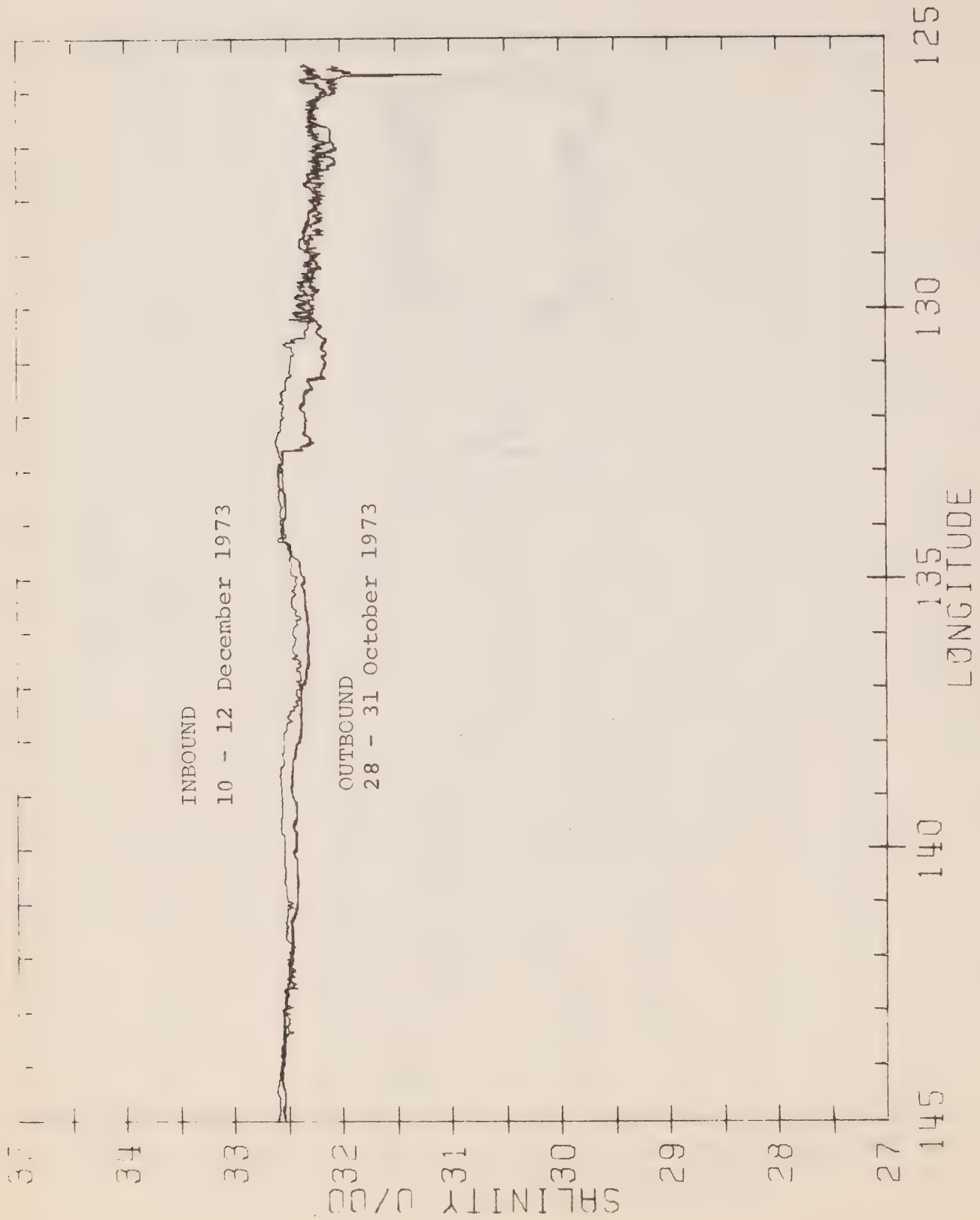


Figure 14 Surface salinity along Line P recorded from thermosalinograph.
P-73-8.

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 73- 8

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
73	10	28	1630	32.257		125-33
73	10	28	1800	32.123		126- 0
73	10	28	1930	32.190		126-40
73	10	29	25	32.303	11.9	127-40
73	10	29	315	32.361	12.3	128-40
73	10	29	645	32.372	12.4	129-40
73	10	29	1030	32.134	10.8	130-40
73	10	29	1415	32.346	10.3	131-40
73	10	29	1830	32.494	10.0	132-40
73	10	29	2220	32.495	10.6	133-40
73	10	30	215	32.388	10.7	134-40
73	10	30	540	32.305	10.4	135-40
73	10	30	900	32.321	10.5	136-40
73	10	30	1215	32.363	10.0	137-40
73	10	30	1550	32.465	10.0	138-40
73	10	30	1900	32.447	9.9	139-40
73	10	30	2200	32.412	9.6	140-40
73	10	31	100	32.478	9.3	141-40
73	10	31	430	32.500	9.5	142-40
73	11	1	0	32.485	9.0	ON STATION
73	11	2	0	32.490	8.9	ON STATION
73	11	3	0	32.498	8.9	ON STATION
73	11	4	0	32.497	8.9	ON STATION
73	11	5	0	32.498	8.8	ON STATION
73	11	6	0	32.499	8.7	ON STATION
73	11	7	0	32.506	8.8	ON STATION
73	11	8	0	32.505	8.7	ON STATION
73	11	9	0	32.503	8.7	ON STATION
73	11	10	0	32.498	8.5	ON STATION
73	11	11	0	32.499	8.5	ON STATION
73	11	12	0	32.500	8.4	ON STATION
73	11	13	0	32.526	8.2	ON STATION
73	11	14	0	32.513	8.1	ON STATION
73	11	15	0	32.519	7.9	ON STATION
73	11	16	0	32.522	8.0	ON STATION
73	11	17	0	32.514	8.0	ON STATION
73	11	18	0	32.520	8.1	ON STATION
73	11	19	0	32.515	8.0	ON STATION
73	11	20	0	32.569	7.6	ON STATION
73	11	21	0	32.548	7.5	ON STATION
73	11	22	0	32.544	7.9	ON STATION
73	11	23	0	32.542	7.8	ON STATION
73	11	24	0	32.544	7.6	ON STATION
73	11	25	0	32.567	7.6	ON STATION
73	11	26	0	32.663	6.9	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 73- 8

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	°C	WEST
73	11	26	0	32.663	6.9	ON STATION
73	11	27	0	32.607	7.5	ON STATION
73	11	28	0	32.642	7.5	ON STATION
73	11	29	0	32.664	6.8	ON STATION
73	11	30	0	32.546	7.3	ON STATION
73	12	1	0	32.562	7.1	ON STATION
73	12	2	0	32.555	7.3	ON STATION
73	12	3	0	32.560	7.1	ON STATION
73	12	4	0	32.564	7.1	ON STATION
73	12	5	0	32.562	7.1	ON STATION
73	12	6	0	32.562	7.1	ON STATION
73	12	8	0	32.572	7.0	ON STATION
73	12	9	0	32.546	7.0	ON STATION
73	12	10	0	32.567	6.9	ON STATION
73	12	10	720	32.530	7.5	142-40
73	12	10	1020	32.519	7.5	141-40
73	12	10	1330	32.518	7.5	140-39
73	12	10	1655	32.533	7.6	139-40
73	12	10	2000	32.553	7.7	138-40
73	12	10	2330	32.487	7.5	137-40
73	12	11	230	32.417	7.7	136-41
73	12	11	545	32.409	7.7	135-40
73	12	11	900	32.465	7.8	134-40
73	12	11	1230	32.581	8.4	133-40
73	12	11	1545	32.591	8.6	132-40
73	12	11	1745	32.580	8.5	131-40
73	12	11	2000		8.5	130-40
73	12	11	2315	32.292	8.0	129-40
73	12	12	250	32.347	8.9	128-38
73	12	12	530	32.292	8.8	127-40
73	12	12	900	32.323		126-40
73	12	12	1110	32.218		126- 0
73	12	12	1300	32.251		125-33

OCEANOGRAPHIC DATA OBTAINED ON CRUISE P-73-9
(CODC REFERENCE NO. 15-73-009)

RESULTS OF HYDROGRAPHIC CASTS

(P-73-9)

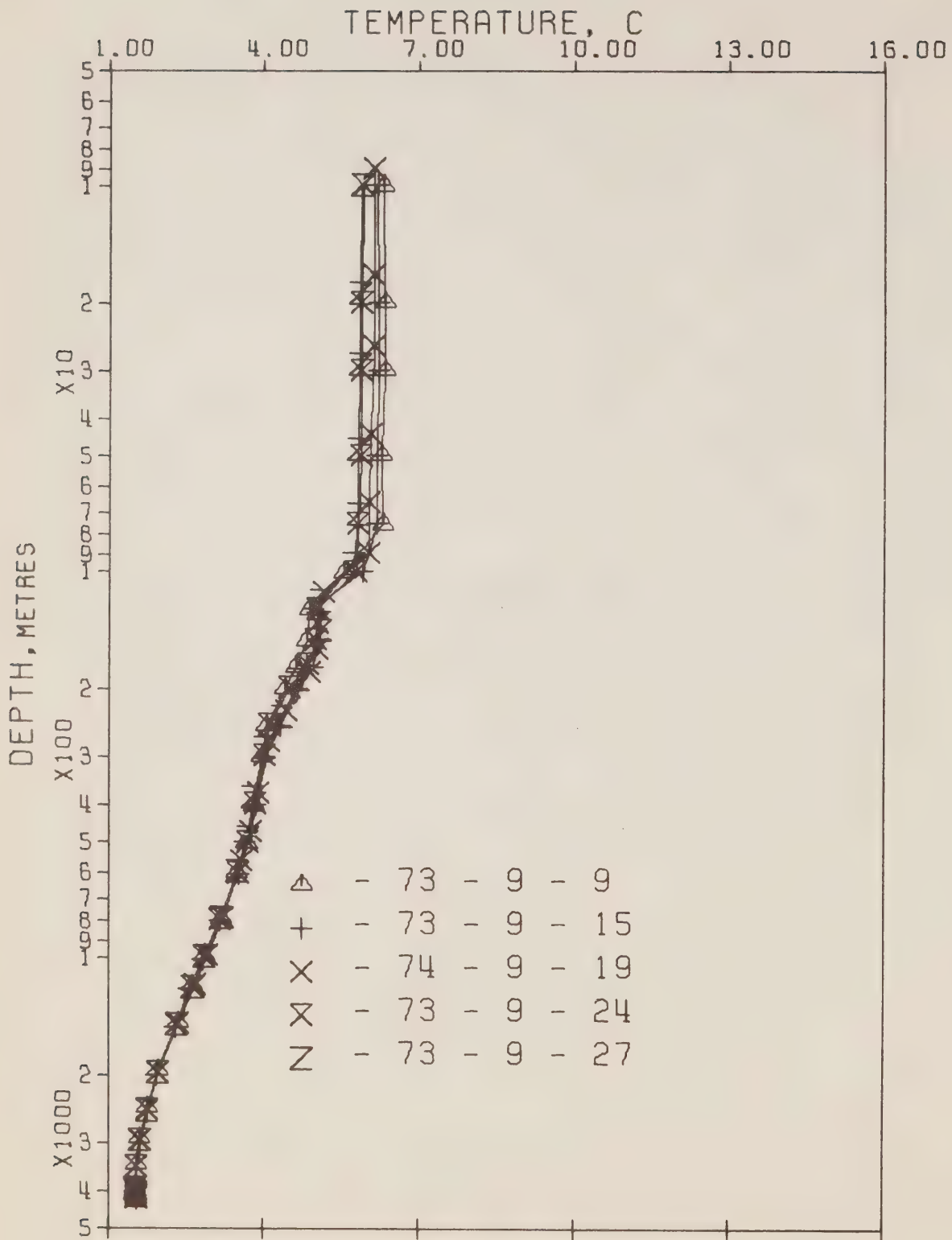


Figure 15 Composite plot of temperature vs \log_{10} depth. P-73-9.

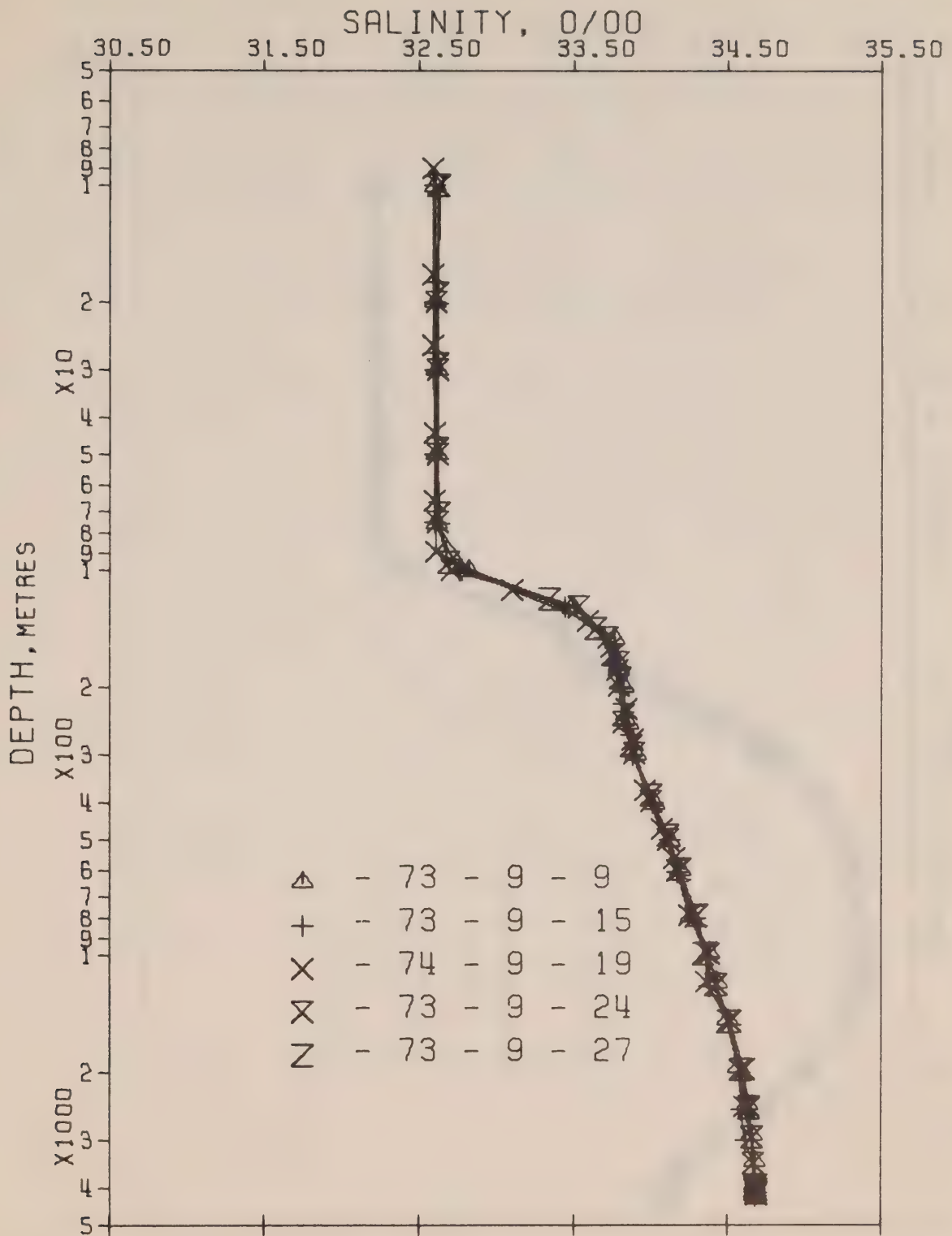


Figure 16 Composite plot of salinity vs \log_{10} depth. P-73-9.

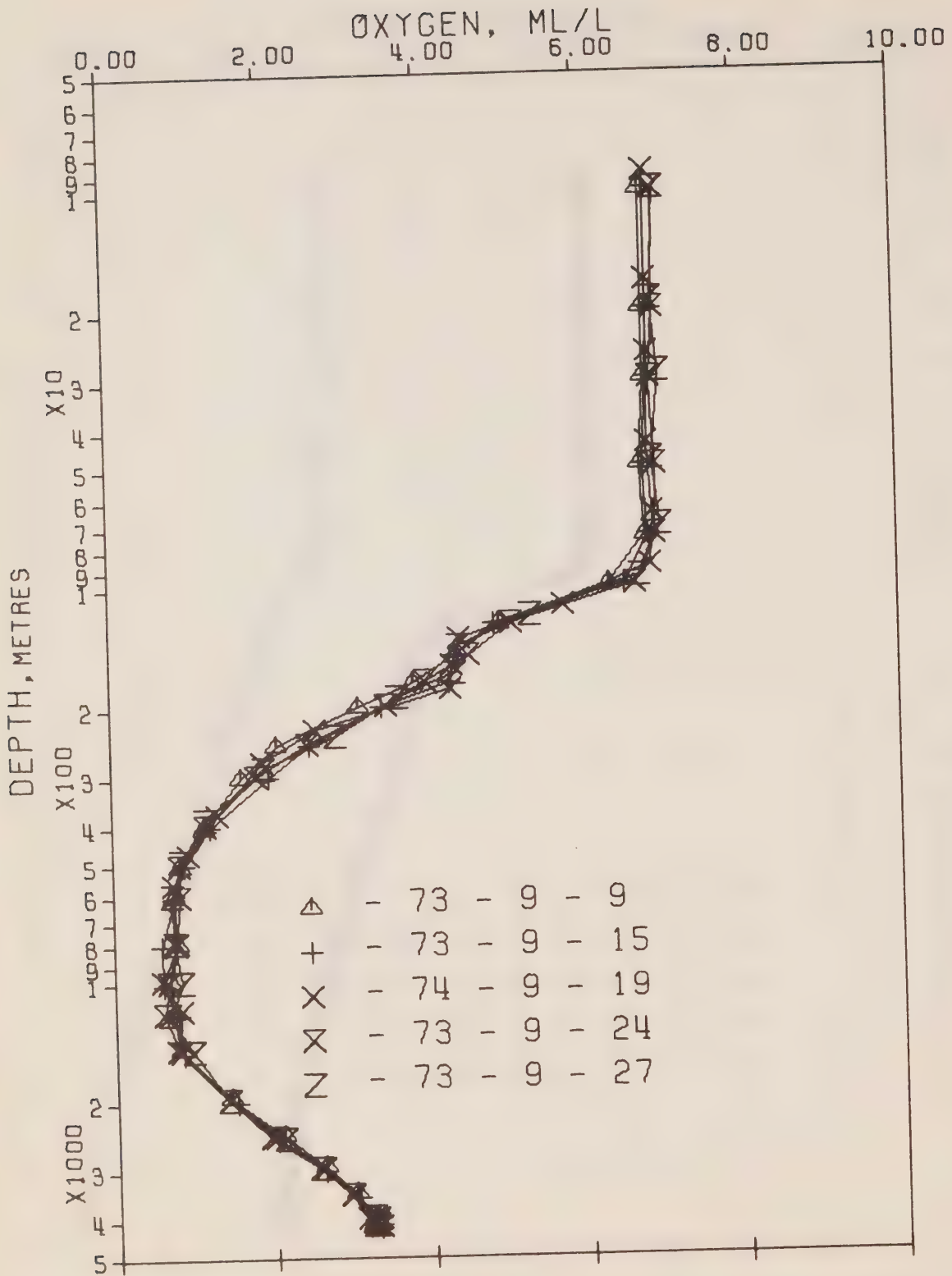
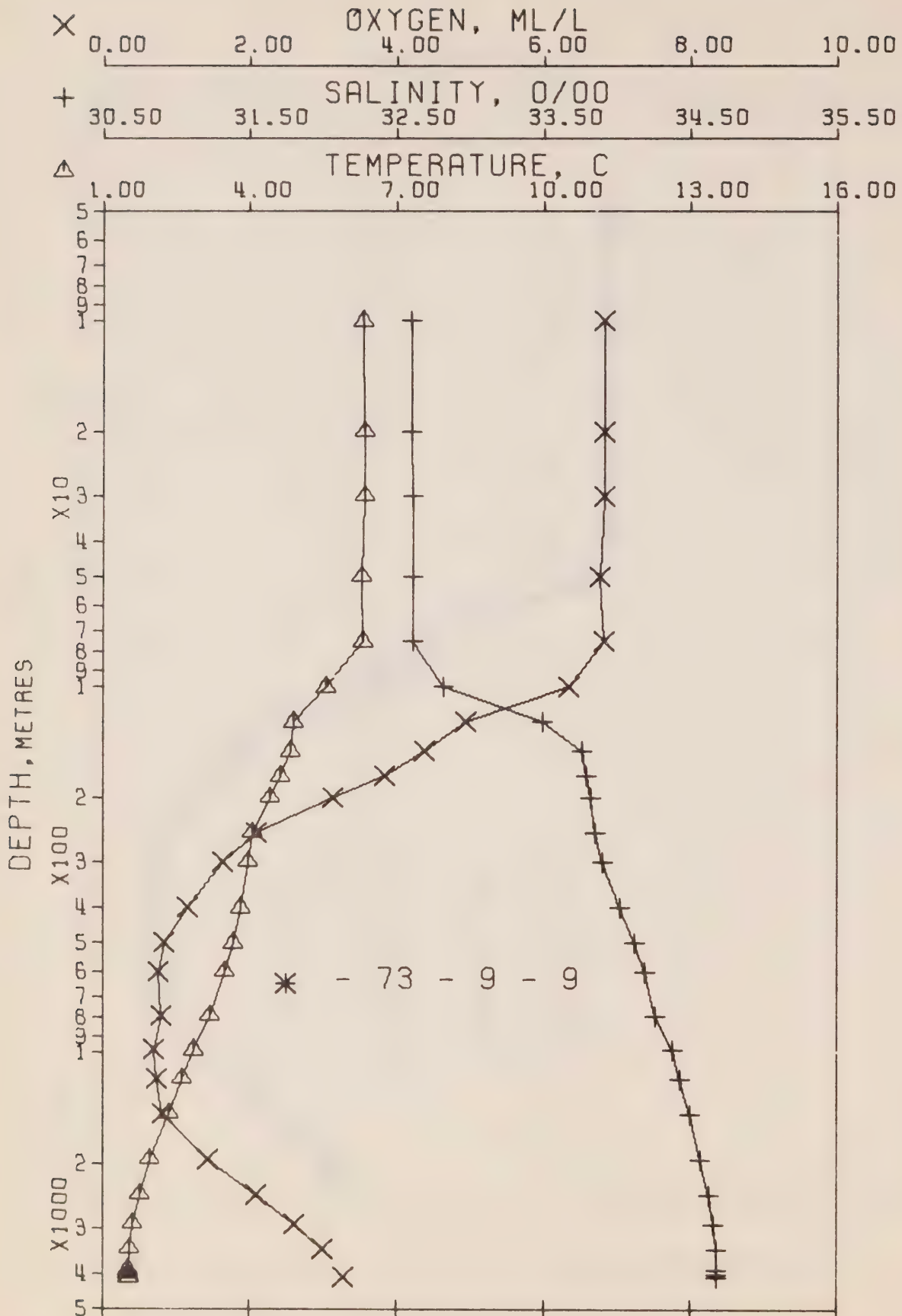


Figure 17 Composite plot of oxygen vs \log_{10} depth. P-73-9.



DATE 15/12/73

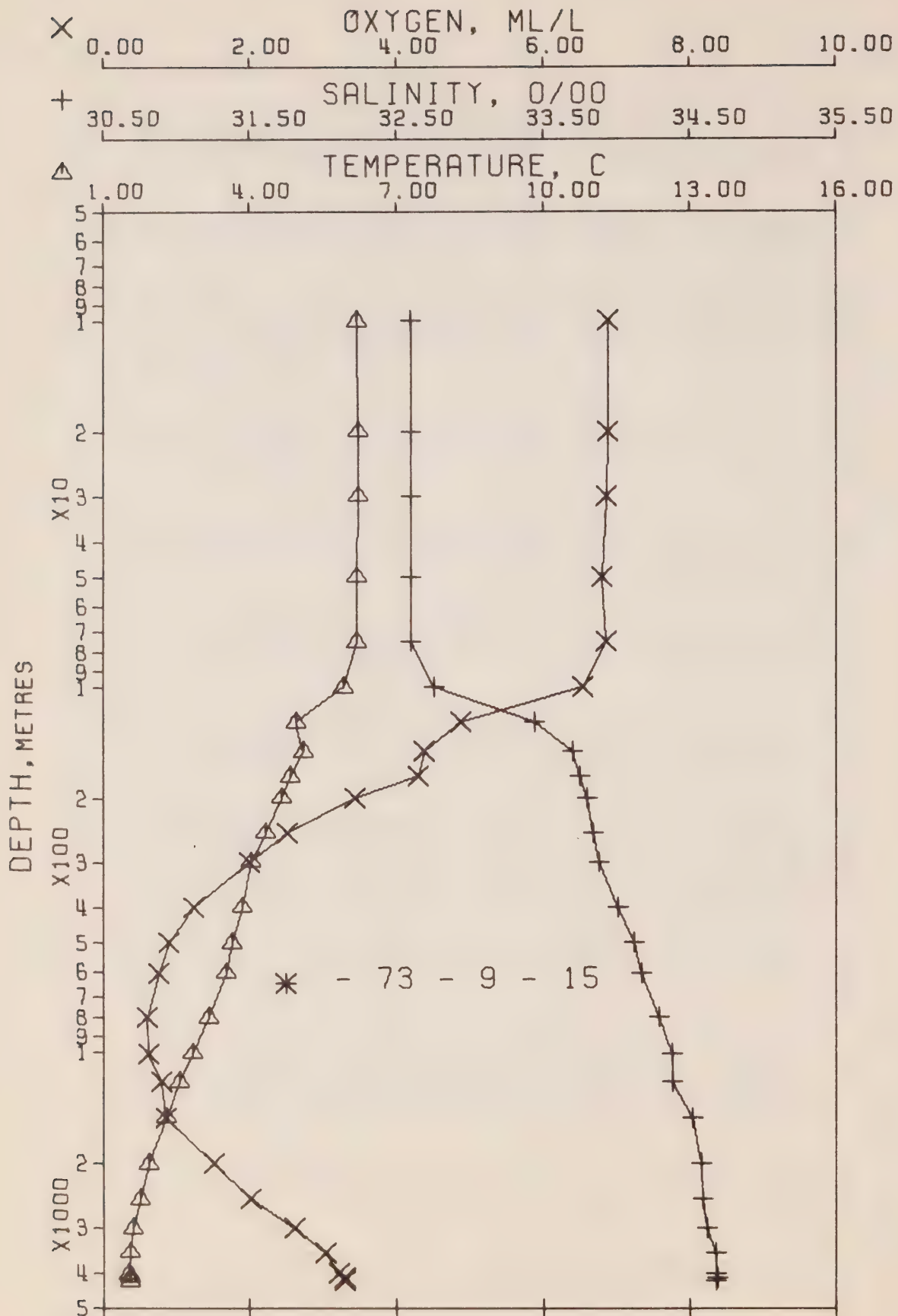
REFERENCE NO. 73- 9- 9

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N, 145- 0.0 W GMT 17.8

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	6.32	32.600	0	25.644	235.7	6.32	235.5	0.0	0.0	6.83	1473.
10	6.32	32.602	10	25.645	235.7	6.32	235.4	0.24	0.01	6.81	1473.
20	6.33	32.605	20	25.646	235.6	6.33	235.2	0.47	0.05	6.82	1474.
30	6.33	32.607	30	25.648	235.7	6.33	235.0	0.71	0.11	6.82	1474.
50	6.29	32.614	50	25.658	234.9	6.29	234.0	1.19	0.30	6.77	1474.
75	6.31	32.613	75	25.655	235.5	6.30	234.3	1.78	0.69	6.81	1474.
101	5.55	32.824	101	25.913	211.2	5.55	209.8	2.35	1.20	6.33	1472.
126	4.39	33.490	125	26.516	154.0	4.88	152.5	2.81	1.73	4.94	1471.
151	4.35	33.757	150	26.732	133.9	4.84	132.0	3.17	2.23	4.38	1471.
176	4.52	33.787	175	26.781	129.4	4.61	127.3	3.49	2.78	3.84	1471.
201	4.43	33.816	200	26.825	125.3	4.42	123.2	3.82	3.39	3.13	1470.
252	4.05	33.855	250	26.890	118.9	4.03	116.4	4.43	4.81	2.09	1470.
302	3.98	33.904	300	26.942	115.0	3.96	112.1	5.02	6.48	1.64	1470.
404	3.33	34.019	401	27.048	105.6	3.80	101.8	6.14	10.53	1.16	1471.
505	3.66	34.124	501	27.149	96.8	3.62	92.3	7.16	15.25	0.83	1472.
606	3.50	34.186	601	27.214	91.3	3.46	86.1	8.11	20.62	0.76	1474.
706	3.13	34.264	789	27.306	83.4	3.13	77.3	9.77	32.49	0.80	1475.
901	2.86	34.376	981	27.425	72.9	2.79	65.9	11.28	46.26	0.70	1477.
1105	2.52	34.427	1173	27.486	67.6	2.54	60.0	12.64	61.35	0.74	1480.
1409	2.35	34.502	1463	27.569	60.5	2.25	52.1	14.52	86.83	0.82	1483.
1671	1.97	34.557	1947	27.652	53.5	1.83	44.0	17.30	135.80	1.43	1490.
2467	1.75	34.629	2434	27.718	48.1	1.58	37.4	19.81	192.44	2.09	1498.
2966	1.60	34.660	2923	27.754	45.4	1.33	33.7	22.13	256.61	2.63	1505.
3467	1.54	34.676	3413	27.772	44.9	1.27	31.8	24.33	330.45	3.01	1514.
3971	1.51	34.633	3905	27.779	45.3	1.19	30.7	26.63	415.75	0.0	1522.
4072	1.52	34.677	4004	27.774	46.1	1.19	31.2	27.03	434.79	0.0	1524.
4163	1.53	34.633	4092	27.778	46.1	1.19	30.7	27.51	452.32	3.27	1526.
4173	1.52	34.634*	4102	27.779	45.9	1.18	30.6	27.56	454.33	0.0	1525.



DATE 28/12/73

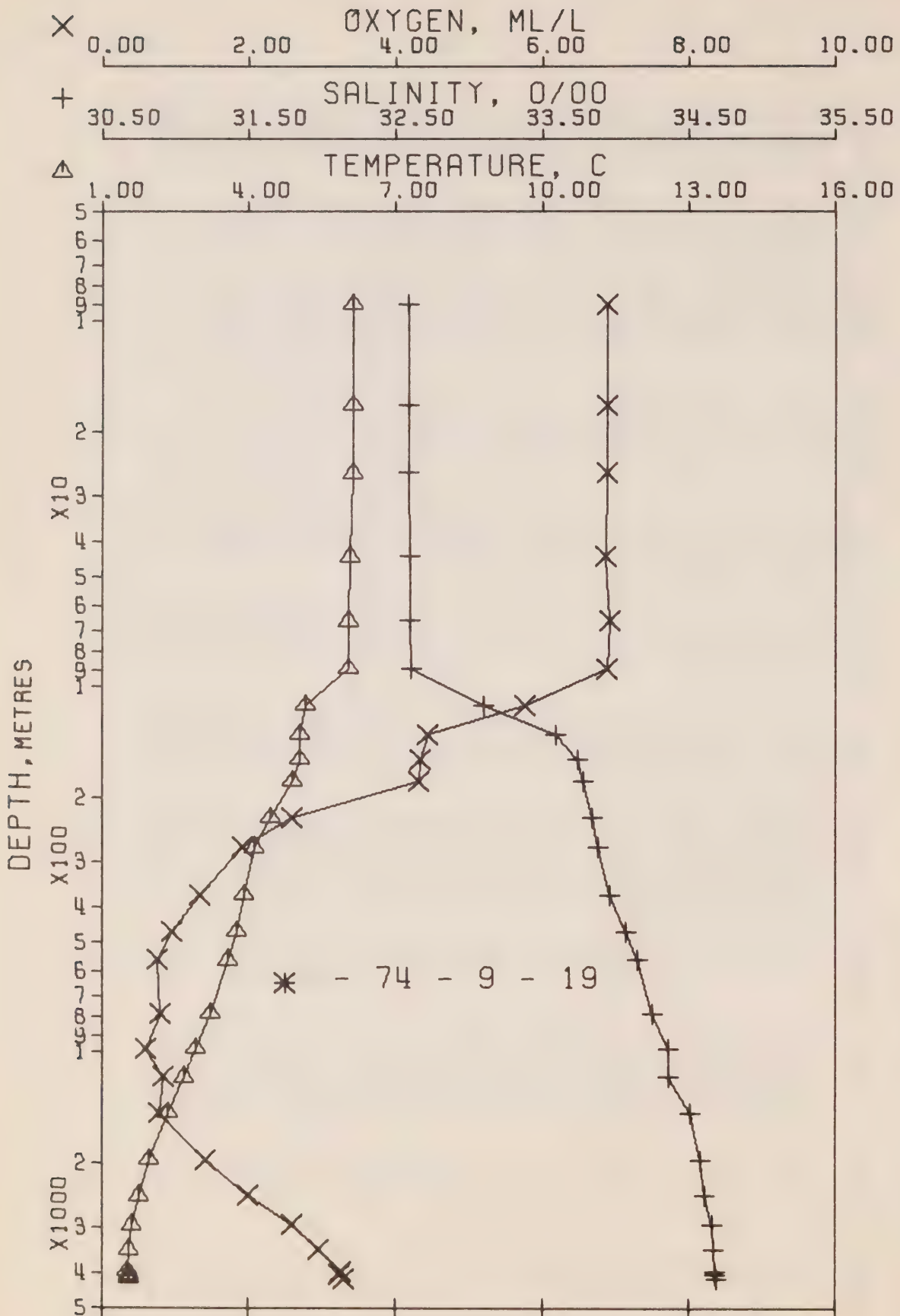
REFERENCE NO. 73- 9- 15

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N, 145- 0.0 W GMT 18.5

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
9	6.20	32.595	0	25.655	234.7	6.20	234.5	0.0	0.0	0.0	1473.
10	6.20	32.596	10	25.655	234.7	6.20	234.4	0.24	0.01	6.88	1473.
20	6.21	32.598	20	25.656	234.7	6.21	234.3	0.47	0.05	6.89	1473.
30	6.21	32.600	30	25.657	234.8	6.21	234.1	0.71	0.11	6.87	1473.
50	6.20	32.603	50	25.661	234.6	6.20	233.7	1.18	0.30	6.81	1474.
75	6.20	32.603	75	25.661	234.9	6.19	233.7	1.77	0.68	6.87	1474.
101	5.91	32.762	100	25.822	219.9	5.90	218.4	2.36	1.21	6.54	1473.
126	4.97	33.437	125	26.465	158.9	4.96	157.3	2.83	1.75	4.87	1471.
151	5.11	33.696	150	26.654	141.3	5.10	139.4	3.20	2.28	4.39	1472.
176	4.85	33.751	175	26.727	134.6	4.84	132.4	3.55	2.85	4.31	1472.
201	4.66	33.800	200	26.787	129.1	4.64	126.7	3.88	3.49	3.44	1471.
252	4.33	33.843	250	26.857	122.8	4.31	120.1	4.51	4.95	2.53	1471.
302	4.03	33.876	300	26.915	117.6	4.01	114.6	5.12	6.67	2.00	1470.
403	3.86	34.013	400	27.041	106.4	3.83	102.6	6.25	10.73	1.23	1472.
506	3.65	34.121	502	27.147	96.9	3.61	92.4	7.29	15.55	0.90	1472.
610	3.51	34.170	605	27.200	92.6	3.47	87.4	8.27	21.15	0.76	1474.
810	3.16	34.288	803	27.327	81.5	3.10	75.3	10.02	33.76	0.60	1476.
1013	2.84	34.380	1003	27.430	72.5	2.77	65.4	11.56	48.12	0.62	1478.
1216	2.57	34.384	1204	27.456	70.3	2.49	62.8	13.02	64.66	0.80	1480.
1523	2.29	34.518	1506	27.587	58.9	2.19	50.3	15.00	92.27	0.85	1484.
2034	1.93	34.582	2009	27.667	52.2	1.79	42.5	17.78	142.70	1.51	1491.
2547	1.74	34.592	2513	27.689	50.9	1.56	40.1	20.41	204.26	2.03	1499.
3062	1.60	34.617	3017	27.720	48.8	1.37	37.0	22.98	277.78	2.63	1507.
3575	1.54	34.680	3519	27.775	44.9	1.26	31.5	25.37	358.63	3.04	1516.
4087	1.52	34.680	4018	27.776	45.9	1.19	30.9	27.70	449.55	3.22	1524.
4189	1.53	34.692	4117	27.785	45.5	1.18	30.0	28.16	469.12	3.31	1526.
4231	1.55	34.685*	4207	27.778	46.6	1.19	30.6	28.59	437.55	0.0	1528.
4290	1.54	34.684	4215	27.778	46.5	1.18	30.6	28.63	489.42	3.30	1528.



DATE 2/ 1/74

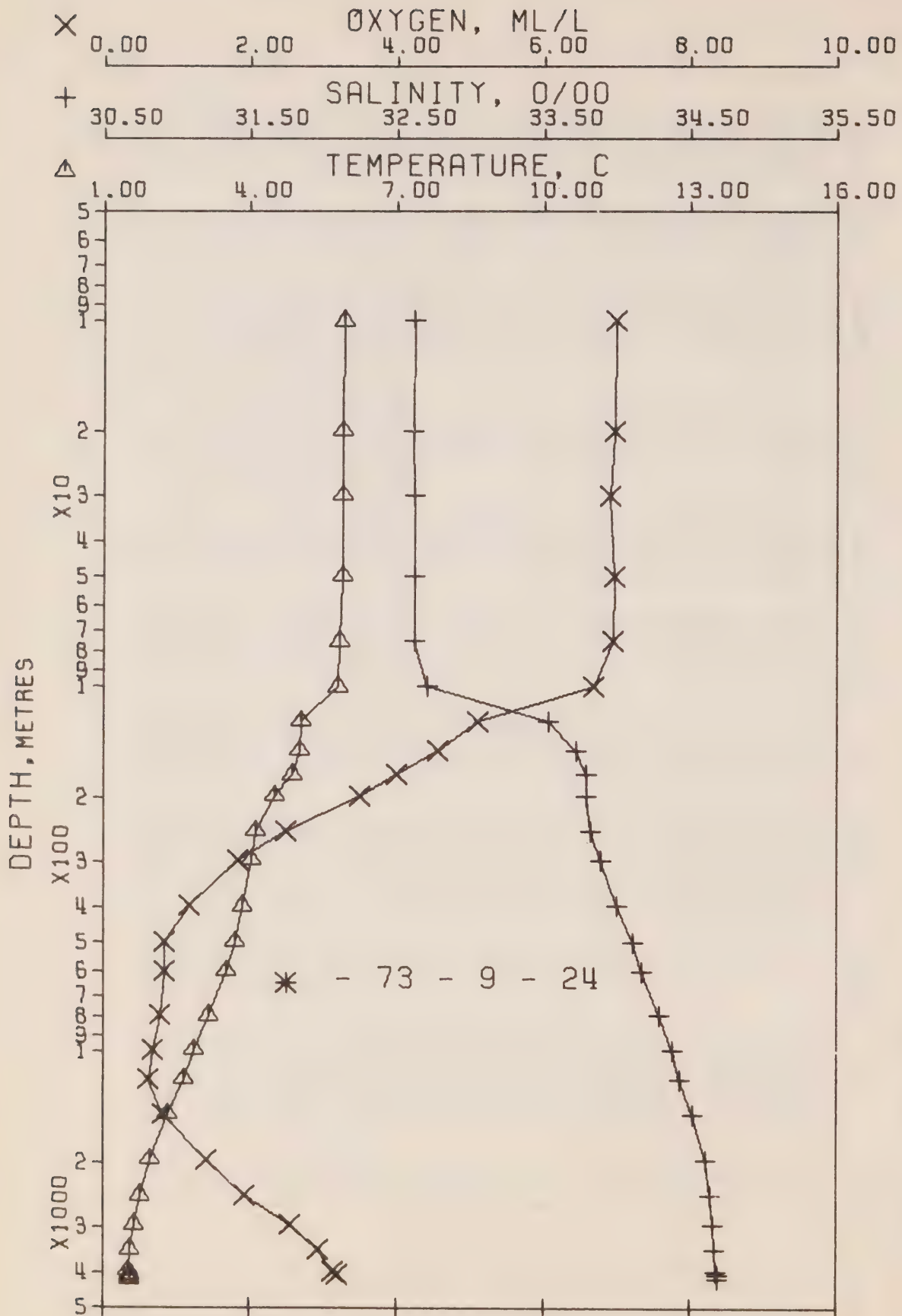
REFERENCE NO. 74- 9- 19

OFFSHORE OCEANOGRAPHY GROUP

POSITION 49-54.0 N, 144-57.0 W GMT 18.9

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DFLTA D	POT. FN	OXY	SOUND
0	6.15	32.590	0	25.657	234.4	6.15	234.2	0.0	0.0	6.90	1472.
3	6.12	32.591	9	25.661	234.2	6.12	233.7	0.21	0.01	6.88	1473.
17	6.12	32.590	17	25.661	234.3	6.12	233.8	0.40	0.03	6.89	1473.
26	6.13	32.590	26	25.659	234.5	6.13	233.9	0.61	0.08	6.89	1473.
44	6.06	32.601	44	25.677	233.0	6.06	232.3	1.04	0.23	6.87	1473.
66	6.04	32.604	66	25.682	232.8	6.03	231.8	1.55	0.52	6.93	1473.
90	6.04	32.607	89	25.684	232.9	6.03	231.6	2.10	0.96	6.88	1474.
113	5.18	33.103	112	26.177	186.1	5.17	184.6	2.59	1.46	5.76	1471.
136	5.04	33.594	135	26.582	148.1	5.03	146.3	2.97	1.95	4.44	1472.
159	5.05	33.739	158	26.695	137.5	5.04	135.5	3.30	2.44	4.35	1472.
182	4.80	33.780	181	26.746	132.9	4.88	130.7	3.61	2.98	4.32	1472.
230	4.46	33.838	228	26.839	124.4	4.44	121.8	4.22	4.26	2.60	1471.
273	4.13	33.879	276	26.907	118.2	4.11	115.4	4.80	5.78	1.92	1470.
374	3.90	33.958	371	26.993	110.6	3.87	107.2	5.90	9.41	1.35	1471.
471	3.75	34.067	467	27.095	101.8	3.72	97.4	6.93	13.84	0.95	1472.
566	3.58	34.148	561	27.176	94.7	3.54	89.7	7.86	18.76	0.75	1473.
789	3.21	34.253	782	27.295	84.5	3.16	78.3	9.85	32.54	0.80	1475.
984	2.91	34.365	975	27.411	74.2	2.84	67.1	11.39	46.41	0.59	1477.
1181	2.68	34.356	1169	27.424	73.5	2.60	65.9	12.83	62.45	0.84	1480.
1481	2.35	34.509	1465	27.575	60.0	2.25	51.5	14.85	89.66	0.77	1484.
1988	1.96	34.581	1964	27.664	52.4	1.82	42.8	17.63	138.95	1.42	1490.
2501	1.76	34.610	2468	27.702	49.6	1.58	39.0	20.23	198.73	1.99	1498.
3015	1.61	34.658	2971	27.752	45.8	1.39	33.9	22.68	267.26	2.59	1506.
3525	1.54	34.670	3470	27.767	45.4	1.27	32.3	24.99	344.54	2.97	1515.
4029	1.52	34.685	3961	27.780	45.4	1.19	30.6	27.27	432.06	3.26	1523.
4127	1.53	34.684	4057	27.779	45.9	1.19	30.6	27.72	450.77	3.24	1525.
4216	1.54	34.688*	4144	27.781	46.0	1.19	30.4	28.13	468.30	0.0	1527.
4226	1.53	34.688	4153	27.782	45.9	1.18	30.3	28.17	470.13	3.31	1527.

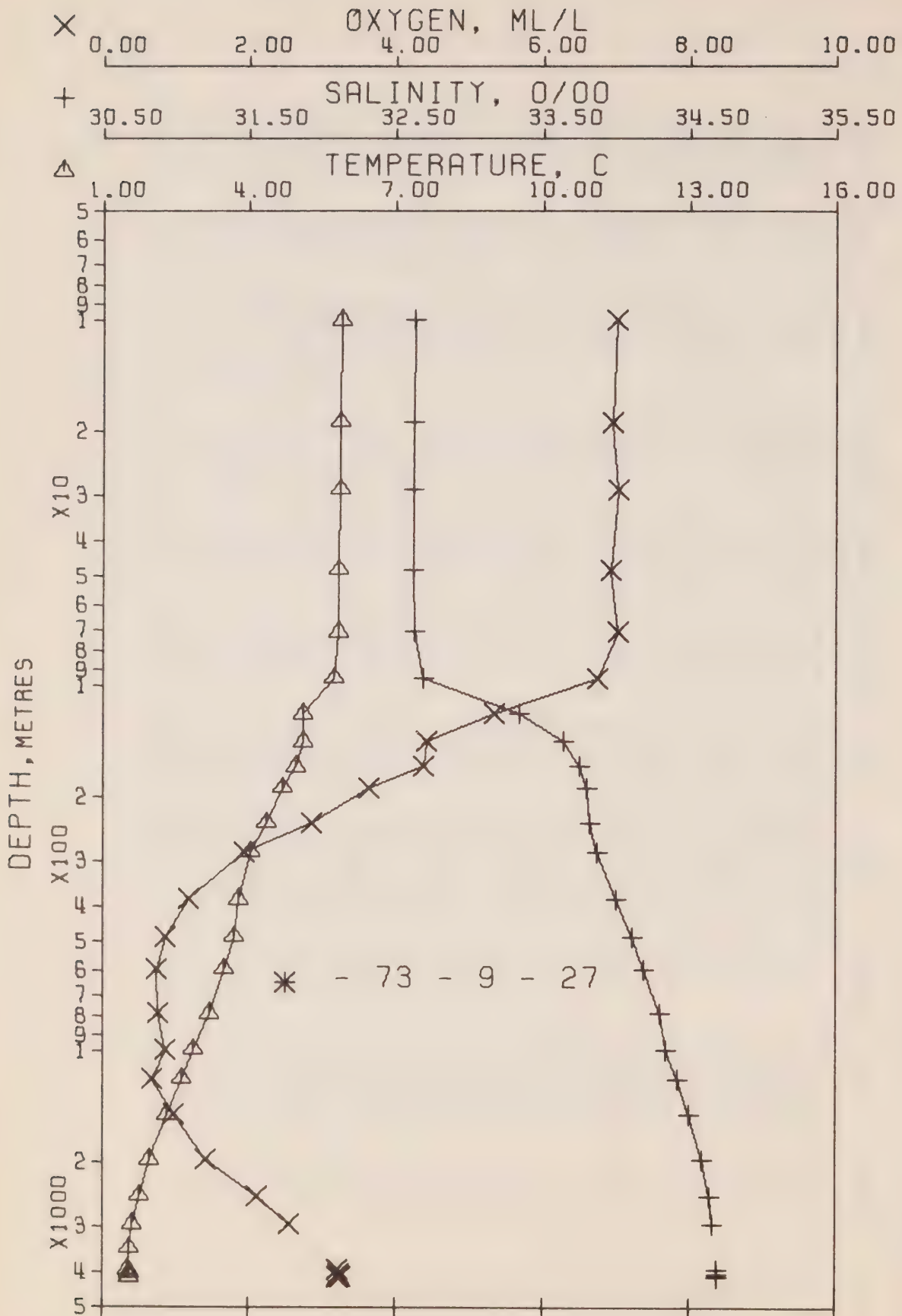


OFFSHORE OCEANOGRAPHY GROUP
 POSITION 50-0.0 N. 145-0.0 W GMT 18.8
 HYDROGRAPHIC CAST DATA

REFERENCE NO. 73- 9- 24

DATE 8/ 1/74

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	NOY	SOUND
2	5.91	32.613	0	25.705	229.9	5.91	229.7	0.0	0.0	6.96	1472.
10	5.91	32.617	10	25.708	229.7	5.91	229.4	0.23	0.01	6.98	1472.
20	5.89	32.611	20	25.705	230.0	5.89	229.6	0.46	0.05	6.95	1472.
30	5.89	32.617	30	25.710	229.7	5.89	229.1	0.69	0.11	6.90	1472.
50	5.83	32.620	50	25.714	229.6	5.88	228.8	1.16	0.30	6.95	1472.
75	5.83	32.625	75	25.724	229.9	5.82	227.8	1.73	0.67	6.95	1472.
101	5.81	32.710	100	25.753	222.5	5.80	221.1	2.31	1.19	6.68	1473.
125	5.85	33.528	124	26.528	152.9	5.04	151.3	2.77	1.71	5.10	1471.
150	5.02	33.722	149	26.585	138.4	5.01	136.5	3.12	2.21	4.57	1472.
175	4.87	33.786	174	26.753	132.2	4.86	130.0	3.46	2.77	4.00	1472.
200	4.52	33.787	199	26.792	128.5	4.51	126.3	3.79	3.40	3.49	1471.
250	4.11	33.821	248	26.863	122.1	4.09	119.6	4.41	4.82	2.51	1470.
300	4.04	33.834	298	26.928	116.4	4.02	113.3	5.01	6.50	1.84	1470.
401	3.86	34.025	398	27.034	107.0	3.83	103.2	6.14	10.52	1.17	1471.
502	3.71	34.106	493	27.130	98.6	3.67	94.1	7.17	15.29	0.84	1473.
605	3.53	34.166	600	27.195	93.1	3.49	87.8	8.16	20.86	0.83	1474.
801	3.16	34.288	794	27.327	81.4	3.10	75.3	9.87	33.10	0.78	1475.
998	2.97	34.379	988	27.426	72.8	2.80	65.8	11.37	45.90	0.68	1478.
1195	2.64	34.433	1183	27.489	67.4	2.56	59.6	12.75	62.35	0.62	1480.
1403	2.33	34.523	1477	27.588	58.9	2.23	50.2	14.63	83.07	0.81	1484.
1694	1.95	34.614	1970	27.690	50.0	1.82	40.3	17.32	135.76	1.43	1491.
2499	1.76	34.638	2466	27.725	47.6	1.58	36.8	19.76	191.91	1.94	1498.
3009	1.62	34.665	2965	27.757	45.4	1.40	33.5	22.13	258.20	2.55	1506.
3519	1.54	34.672	3464	27.768	45.3	1.27	32.1	24.43	334.98	2.94	1515.
4030	1.52	34.685	3962	27.780	45.4	1.19	30.6	26.75	424.21	3.13	1523.
4131	1.53	34.693	4061	27.786	45.3	1.19	30.0	27.21	443.37	3.19	1525.
4224	1.54	34.694*	4151	27.786	45.6	1.19	29.9	27.63	461.33	0.0	1527.
4234	1.53	34.694	4161	27.787	45.5	1.18	29.9	27.68	463.35	0.0	1527.



DATE 12/ 1/74

REFERENCE NO. 73- 9- 27

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N, 145- 0.0 W GMT 18.7

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.85	32.626	0	25.722	228.3	5.85	228.0	0.0	0.0	6.93	1471.
10	5.88	32.627	10	25.719	228.6	5.88	228.3	0.23	0.01	7.01	1472.
19	5.86	32.624	19	25.719	228.7	5.86	228.3	0.44	0.04	6.93	1472.
29	5.85	32.621	29	25.718	228.9	5.85	228.4	0.67	0.10	7.01	1472.
48	5.84	32.621	48	25.719	229.0	5.84	228.2	1.11	0.27	6.91	1472.
71	5.83	32.626	71	25.725	228.8	5.82	227.8	1.64	0.60	7.01	1472.
96	5.74	32.687	95	25.783	223.5	5.73	222.1	2.19	1.07	6.75	1473.
120	5.11	33.345	119	26.377	167.2	5.10	165.7	2.67	1.59	5.33	1471.
143	5.10	33.643	142	26.514	145.1	5.09	143.3	3.02	2.06	4.43	1472.
167	4.97	33.750	166	26.713	135.9	4.96	133.8	3.36	2.60	4.38	1472.
191	4.70	33.801	190	26.784	129.4	4.69	127.1	3.68	3.18	3.64	1471.
239	4.35	33.817	237	26.834	124.8	4.33	122.3	4.28	4.50	2.87	1471.
287	4.03	33.873	285	26.912	117.7	4.01	114.9	4.87	6.07	1.94	1470.
386	3.79	34.003	383	27.040	106.2	3.76	102.7	5.97	9.85	1.18	1471.
489	3.71	34.109	485	27.132	98.3	3.68	93.9	7.02	14.54	0.86	1472.
598	3.50	34.193	593	27.219	90.7	3.46	85.6	8.05	20.24	0.73	1473.
793	3.18	34.297	786	27.332	80.9	3.13	74.7	9.71	32.02	0.77	1475.
995	2.86	34.338	985	27.394	75.8	2.79	68.8	11.28	46.39	0.86	1477.
1196	2.62	34.421	1184	27.482	68.1	2.54	60.5	12.73	62.57	0.67	1480.
1499	2.33	34.501	1483	27.570	60.5	2.23	52.0	14.67	89.19	0.98	1484.
2002	1.96	34.595	1978	27.675	51.4	1.82	41.8	17.46	138.87	1.42	1491.
2506	1.74	34.641	2472	27.729	47.2	1.56	36.4	19.91	195.41	2.11	1498.
3007	1.60	34.664	2963	27.758	45.3	1.38	33.5	22.22	260.15	2.57	1506.
3508	1.54	34.674*	3453	27.770	45.1	1.27	32.0	24.48	335.22	0.0	1514.
4009	1.52	34.688	3942	27.783	45.1	1.20	30.4	26.73	421.64	3.21	1523.
4109	1.54	34.694	4039	27.786	45.3	1.20	30.0	27.18	440.26	3.24	1525.
4199	1.53	34.687	4127	27.781	45.9	1.18	30.4	27.60	457.84	3.22	1526.
4209	1.53	34.692	4137	27.785	45.6	1.18	30.0	27.65	459.86	3.25	1526.

RESULTS OF STD CASTS

(P-73-9)

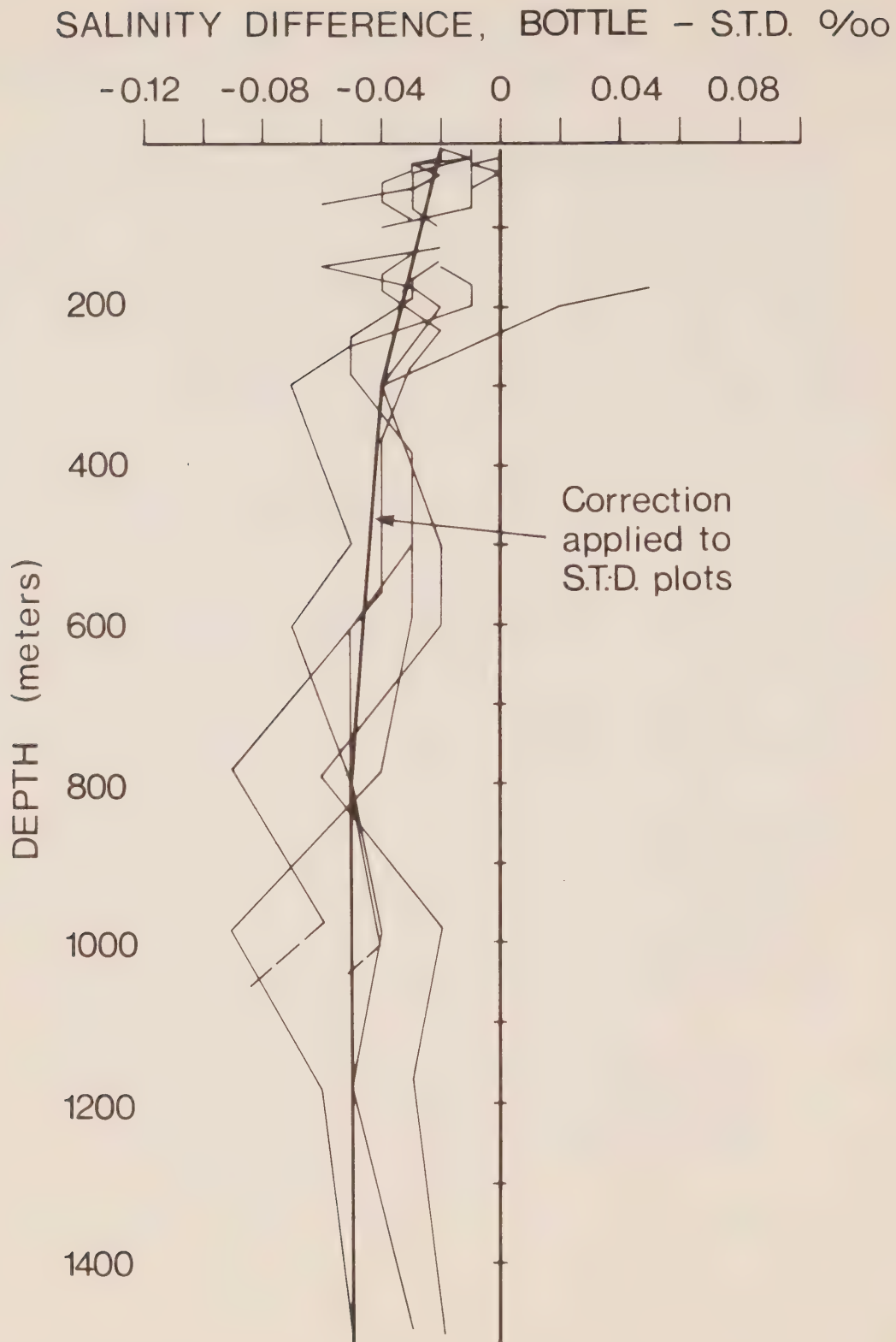


Figure 18 Salinity difference between hydro data and STD. P-73-9.

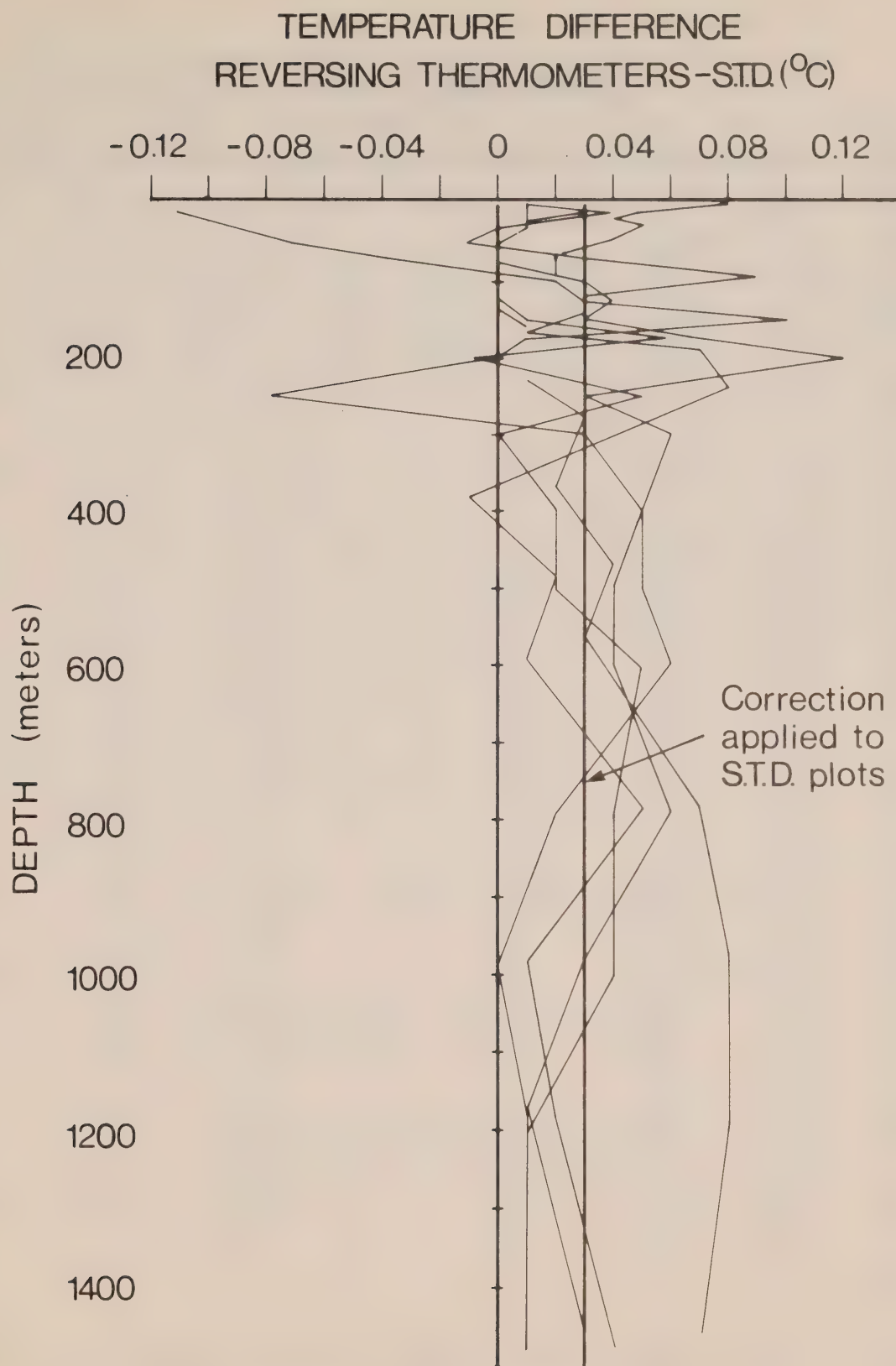
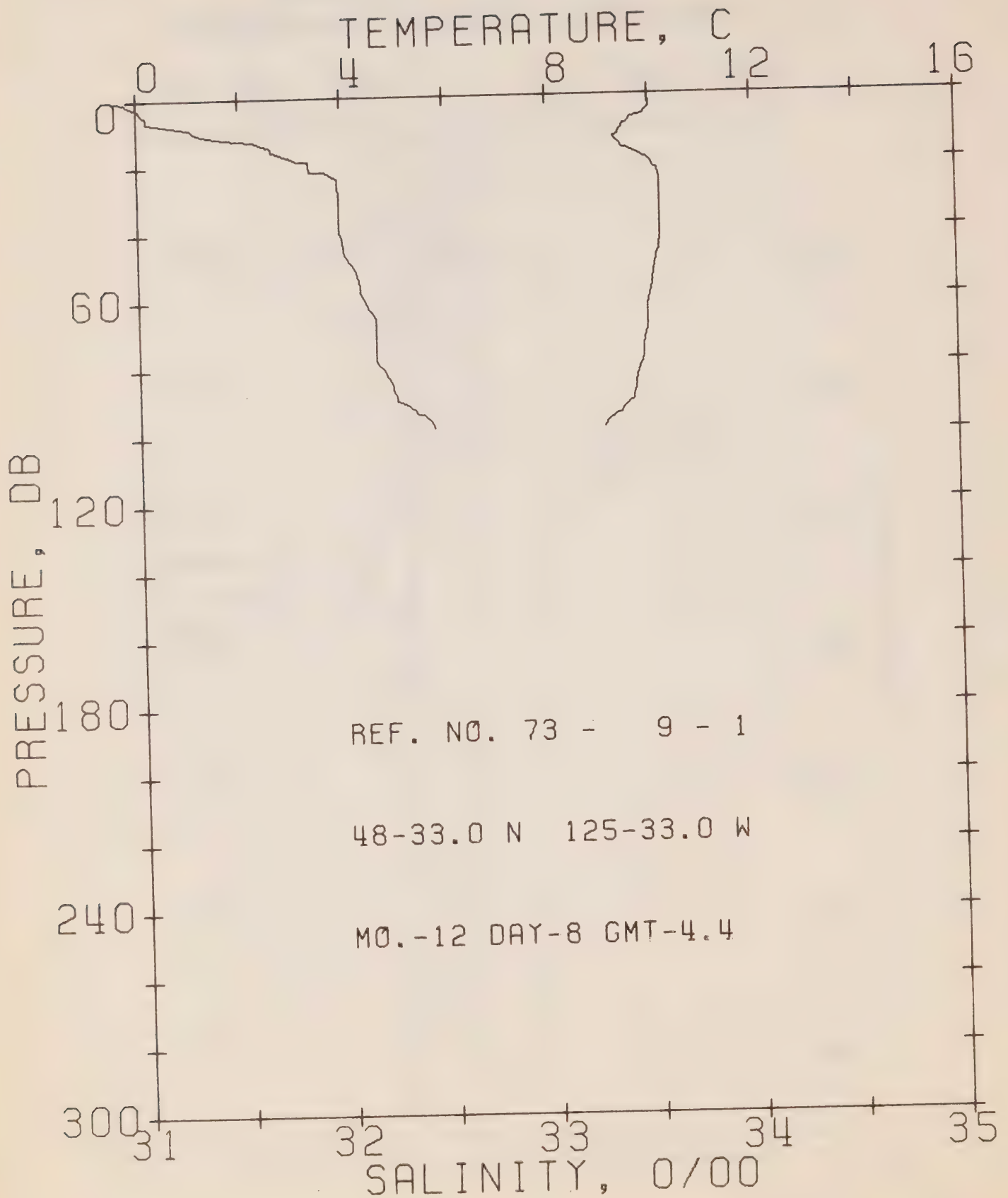


Figure 19 Temperature difference between hydro data and STD. P-73-9.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- 9- 1

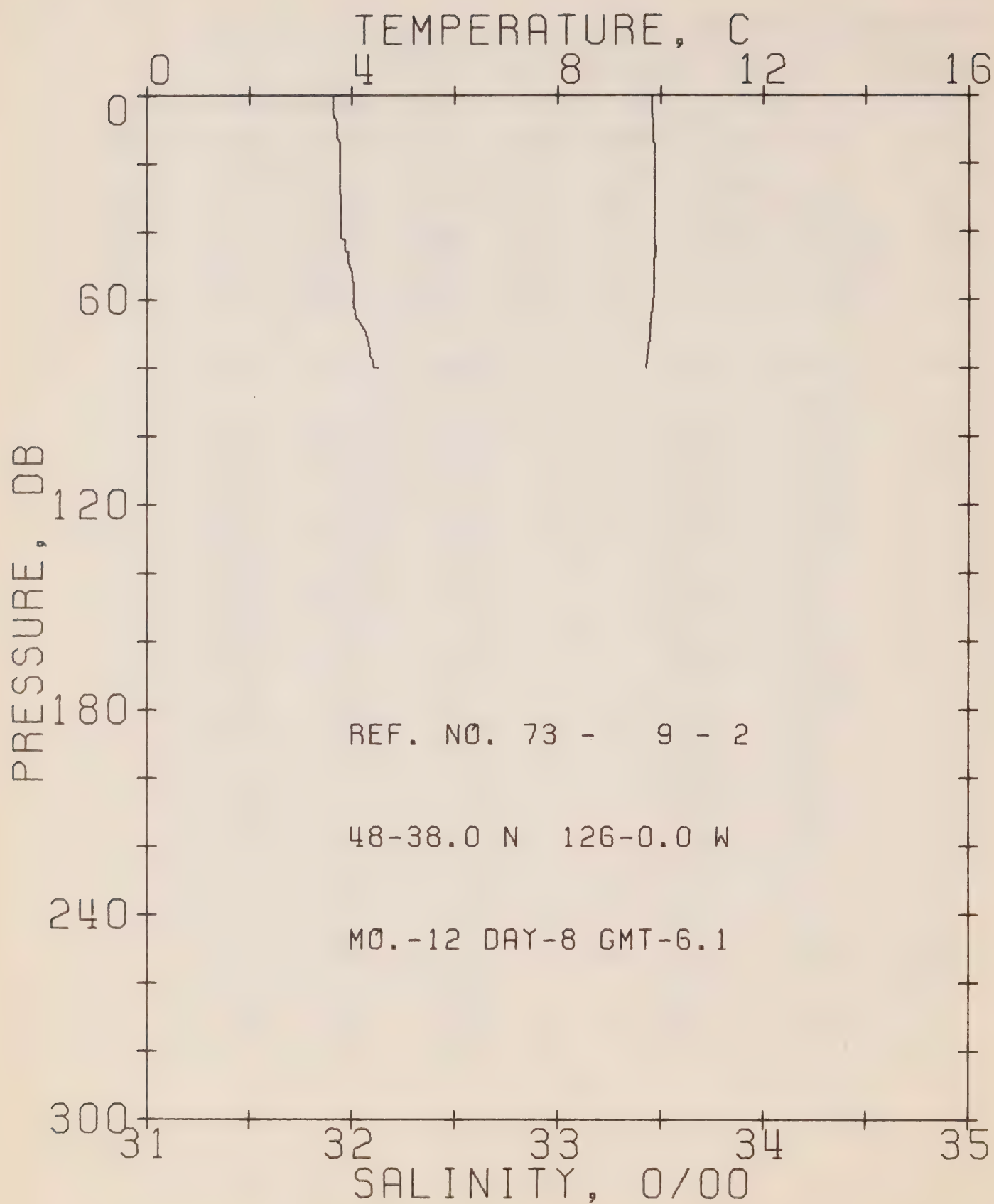
DATE 8/12/73

POSITION 48-33.0N, 125-33.0W GMT 4.4

RESULTS OF STP CAST 58 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.00	30.86	0	23.75	415.8	0.0	0.0	1485.
10	9.48	31.28	10	24.16	377.1	0.40	0.02	1484.
20	10.03	31.94	20	24.51	344.2	0.75	0.07	1487.
30	10.20	31.99	30	24.59	336.1	1.09	0.16	1488.
50	10.11	32.05	50	24.66	330.5	1.76	0.43	1489.
75	9.87	32.16	75	24.78	319.0	2.57	0.95	1487.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	10.00	30.86	42.	10.20	32.00
1.	10.01	30.94	46.	10.18	32.01
2.	10.01	30.97	48.	10.14	32.03
3.	10.02	31.01	51.	10.10	32.06
4.	10.03	31.02	52.	10.09	32.07
5.	9.94	31.05	56.	10.04	32.09
6.	9.91	31.05	58.	10.02	32.09
7.	9.69	31.05	63.	9.96	32.13
9.	9.57	31.25	64.	9.96	32.15
9.	9.52	31.26	66.	9.95	32.16
10.	9.48	31.28	70.	9.94	32.16
11.	9.45	31.32	71.	9.92	32.16
12.	9.42	31.43	72.	9.90	32.16
12.	9.39	31.43	75.	9.87	32.16
13.	9.30	31.57	78.	9.87	32.16
15.	9.43	31.66	79.	9.83	32.17
16.	9.48	31.66	81.	9.78	32.20
16.	9.58	31.67	82.	9.76	32.21
13.	9.85	31.76	85.	9.71	32.24
19.	9.90	31.78	87.	9.70	32.24
19.	9.95	31.84	88.	9.68	32.25
20.	10.03	31.84	89.	9.66	32.26
22.	10.10	31.85	90.	9.65	32.26
22.	10.13	31.92	91.	9.58	32.30
23.	10.16	31.94	93.	9.43	32.35
24.	10.19	31.98	94.	9.40	32.36
25.	10.21	31.98	94.	9.33	32.39
31.	10.20	31.99	96.	9.16	32.42
40.	10.20	31.99	98.	9.06	32.44



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 73- 9- 2

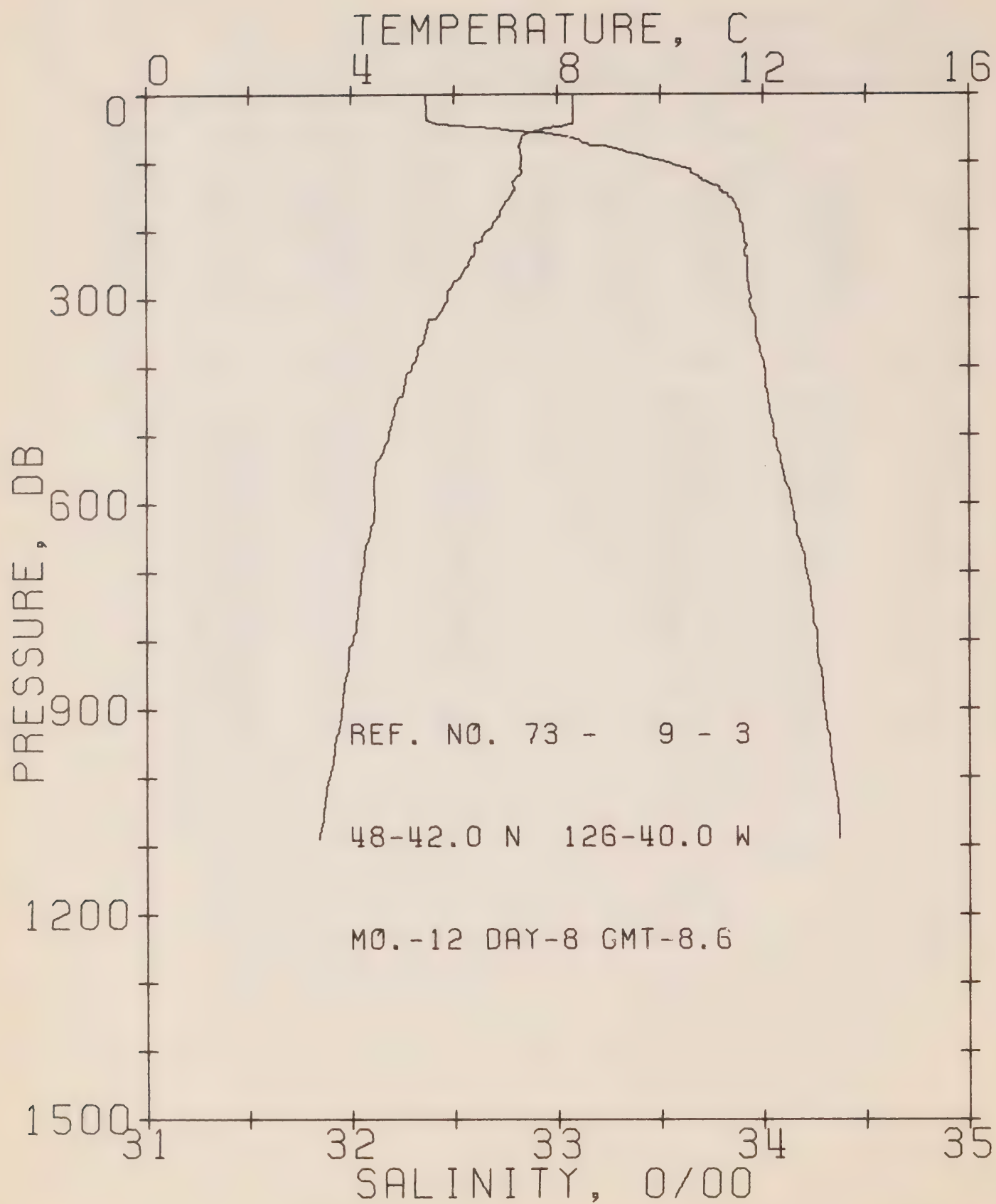
DATE 8/12/73

POSITION 48-38.0N, 126- 0.0W GMT 6.1

RESULTS OF STP CAST 30 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.82	31.91	0	24.60	335.1	0.0	0.0	1485.
10	9.83	31.93	10	24.61	334.2	0.33	0.02	1486.
20	9.86	31.94	20	24.61	334.1	0.67	0.07	1486.
30	9.87	31.95	30	24.62	334.0	1.00	0.15	1486.
50	9.87	31.98	50	24.65	331.5	1.67	0.43	1487.
75	9.76	32.09	75	24.75	322.4	2.49	0.95	1487.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	9.82	31.91	49.	9.88	31.98
4.	9.81	31.91	51.	9.87	31.99
6.	9.82	31.91	52.	9.87	32.00
8.	9.84	31.93	58.	9.87	32.01
11.	9.83	31.93	62.	9.85	32.01
13.	9.85	31.93	66.	9.82	32.02
14.	9.85	31.94	66.	9.82	32.03
15.	9.86	31.94	68.	9.79	32.05
20.	9.86	31.94	70.	9.78	32.07
39.	9.87	31.95	75.	9.76	32.09
42.	9.87	31.95	76.	9.75	32.09
43.	9.88	31.97	77.	9.74	32.09
45.	9.89	31.97	78.	9.73	32.10
46.	9.89	31.98	80.	9.70	32.11
47.	9.89	31.98	80.	9.70	32.13



OFFSHORE OCEANOGRAPHY GROUP

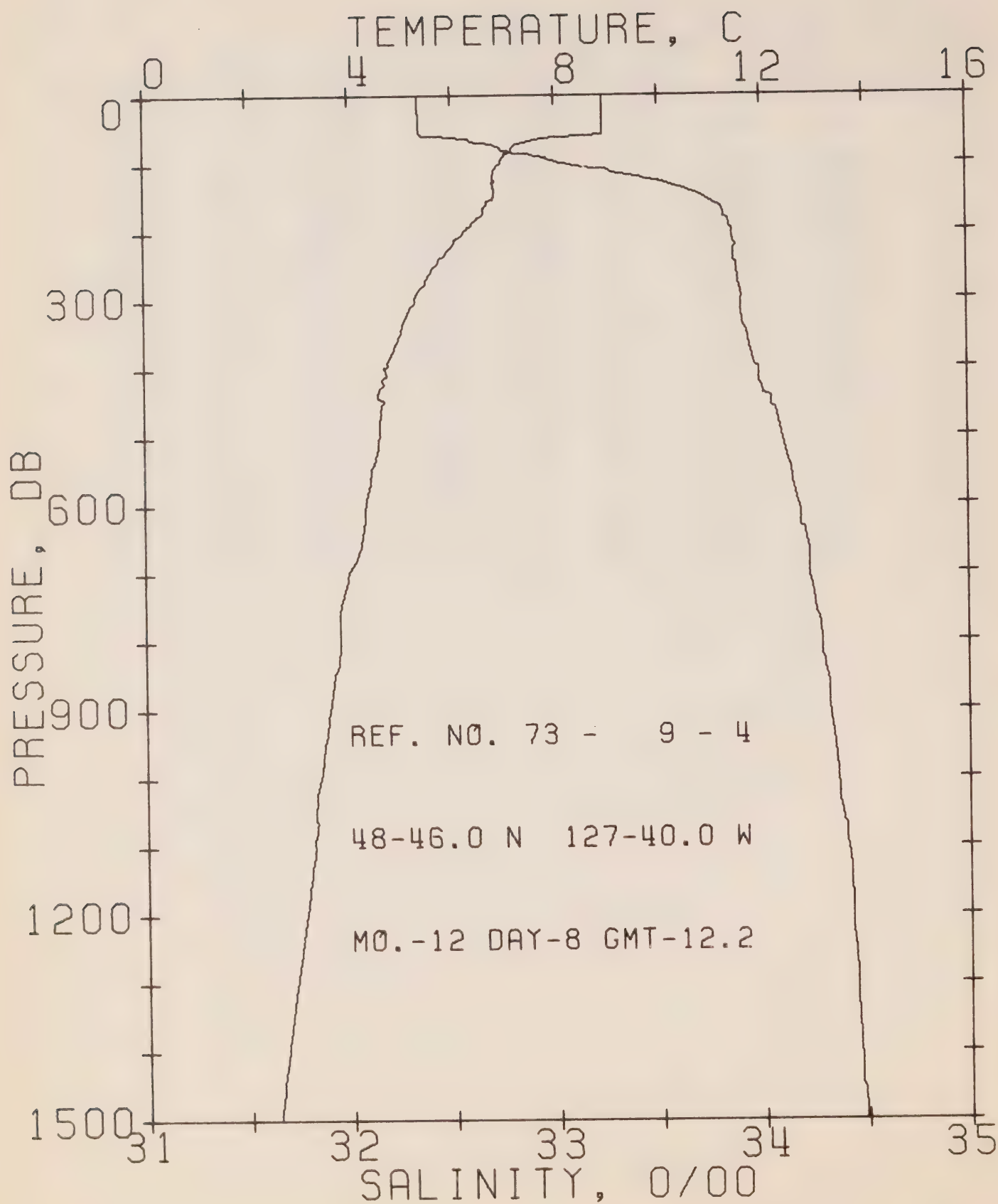
REFERENCE NO. 73- 9- 3

DATE 8/12/73

POSITION 48-42.0N, 126-40.0W GMT 8.6

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.28	32.36	0	25.19	278.9	0.0	0.0	1481.
10	8.28	32.36	10	25.19	279.1	0.28	0.01	1481.
20	8.28	32.37	20	25.19	279.0	0.56	0.06	1481.
30	8.28	32.37	30	25.19	279.0	0.84	0.13	1481.
50	7.87	32.66	50	25.48	251.8	1.38	0.35	1480.
75	7.25	33.16	75	25.96	206.6	1.93	0.70	1479.
100	7.27	33.54	99	26.26	178.9	2.41	1.12	1480.
125	7.16	33.70	124	26.40	166.0	2.84	1.62	1480.
150	7.06	33.83	149	26.51	155.3	3.24	2.18	1480.
175	6.87	33.88	174	26.58	149.5	3.62	2.80	1480.
200	6.65	33.90	199	26.62	145.4	3.99	3.51	1479.
225	6.40	33.92	223	26.67	141.1	4.35	4.28	1479.
250	6.27	33.92	248	26.69	139.7	4.70	5.14	1479.
300	5.86	33.94	298	26.76	133.7	5.38	7.05	1478.
400	5.17	34.00	397	26.89	122.1	6.66	11.59	1477.
500	4.72	34.05	496	26.98	114.1	7.83	16.98	1477.
600	4.45	34.14	595	27.08	105.5	8.92	23.08	1477.
800	4.00	34.26	793	27.22	92.9	10.90	37.13	1479.
1000	3.55	34.34	991	27.33	83.2	12.66	53.28	1480.



OFFSHORE OCEANOGRAPHY GROUP

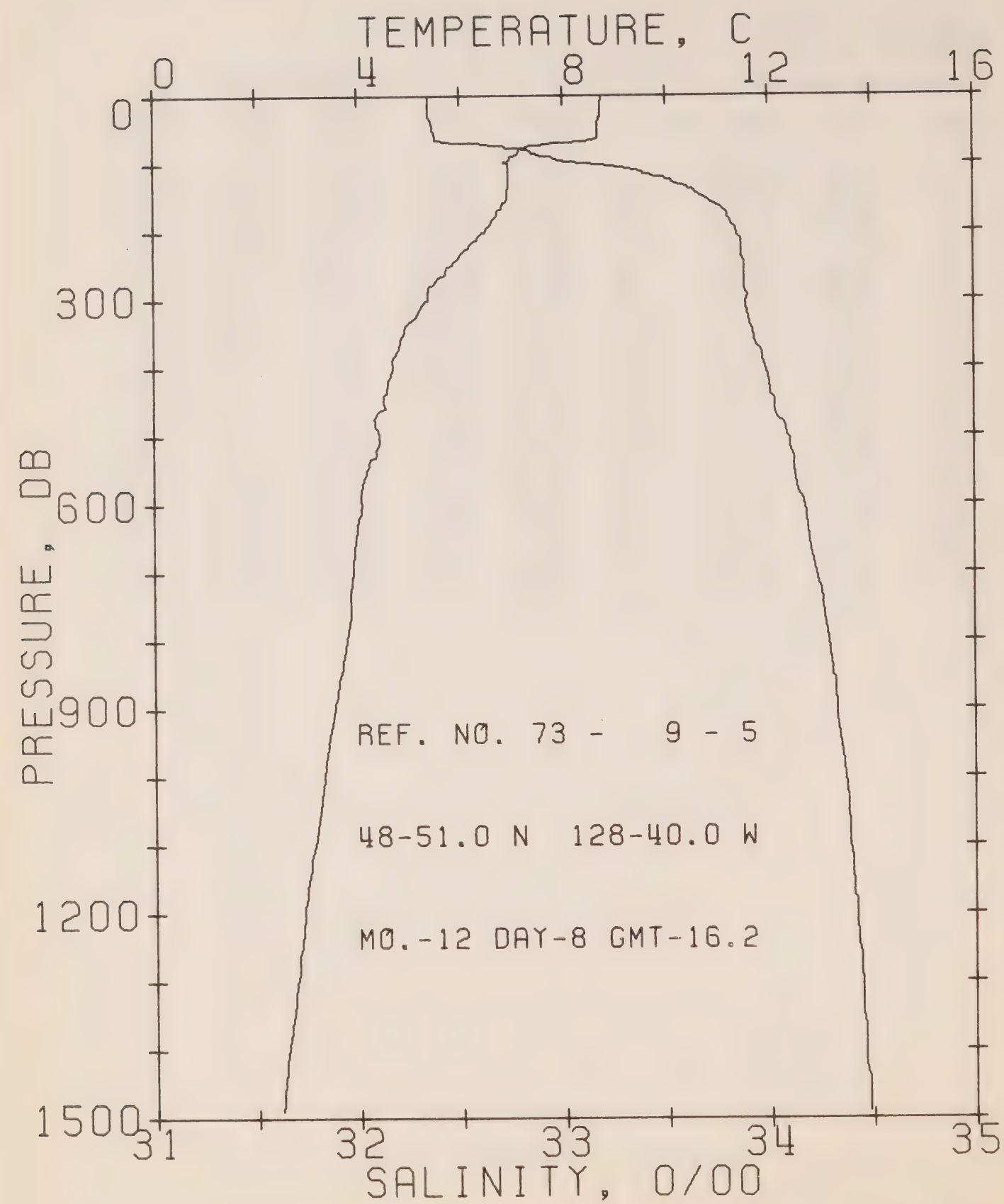
REFERENCE NO. 73- 9- 4

DATE 8/12/73

POSITION 48-46.0N, 127-40.0W GMT 12.2

RESULTS OF STP CAST 193 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	PCT. EN	SOUND
0	8.94	32.34	0	25.07	289.9	0.0	0.0	1483.
10	8.94	32.34	10	25.07	290.2	0.29	0.01	1483.
20	8.94	32.34	20	25.07	290.2	0.58	0.06	1483.
30	8.94	32.35	30	25.08	290.2	0.87	0.13	1484.
50	8.94	32.35	50	25.08	290.3	1.45	0.37	1484.
75	7.20	32.73	75	25.63	238.0	2.12	0.79	1478.
100	6.96	33.03	99	25.90	212.9	2.68	1.29	1478.
125	6.84	33.51	124	26.29	175.8	3.17	1.85	1478.
150	6.81	33.73	149	26.47	159.5	3.59	2.43	1479.
175	6.59	33.82	174	26.57	150.3	3.97	3.07	1479.
200	6.25	33.86	199	26.65	143.2	4.34	3.77	1478.
225	5.95	33.87	223	26.69	139.1	4.69	4.53	1477.
250	5.69	33.88	248	26.73	135.5	5.03	5.36	1476.
300	5.29	33.90	298	26.80	129.5	5.69	7.21	1476.
400	4.71	33.99	397	26.93	117.6	6.94	11.65	1475.
500	4.56	34.10	496	27.04	108.5	8.07	16.82	1476.
600	4.31	34.18	595	27.13	100.5	9.11	22.68	1477.
800	3.78	34.29	793	27.27	88.2	10.99	36.06	1478.
1000	3.38	34.36	991	27.37	79.6	12.67	51.41	1480.
1200	3.08	34.43	1188	27.45	72.7	14.19	68.39	1482.



OFFSHORE OCEANOGRAPHY GROUP

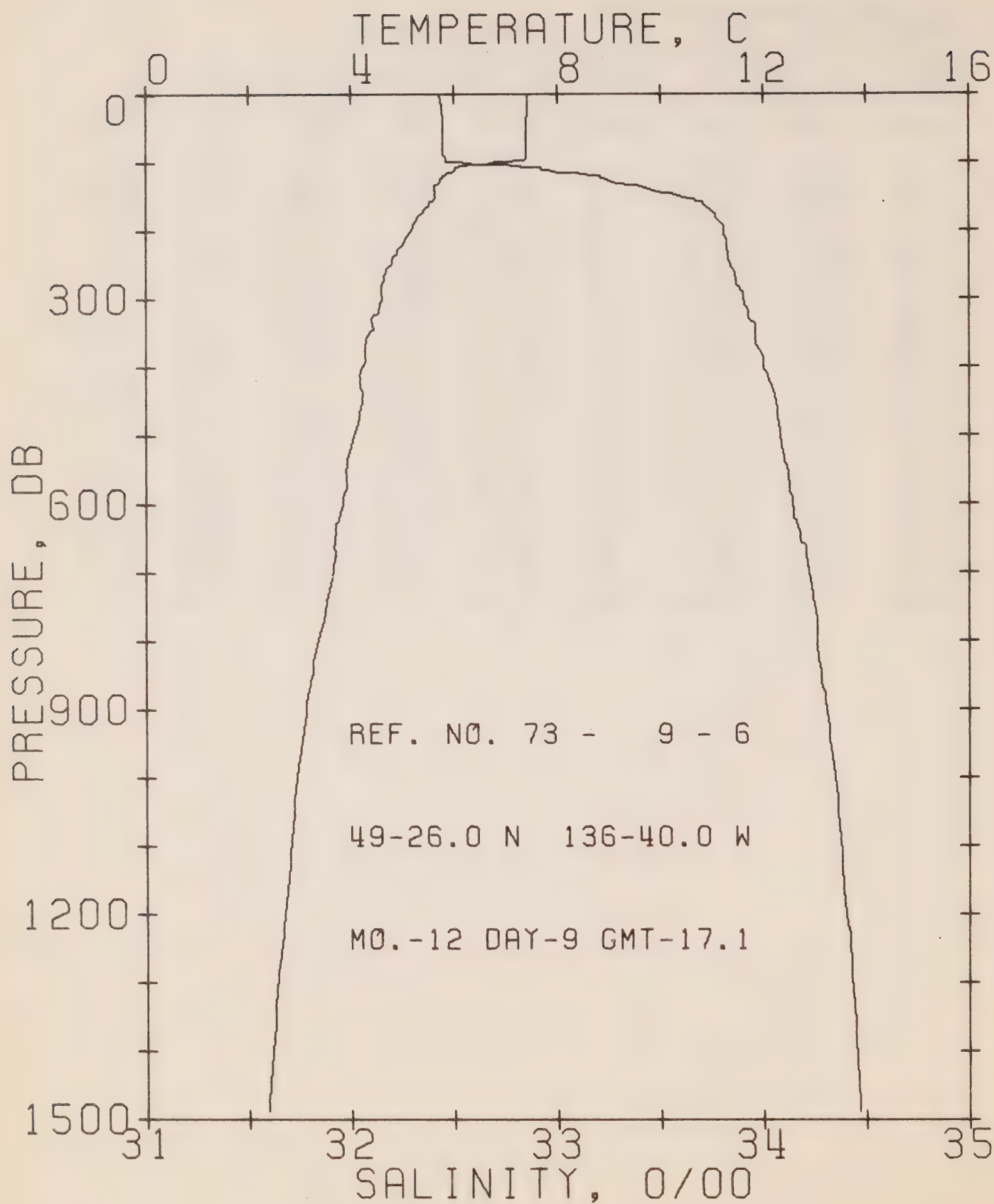
REFERENCE NO. 73- 9- 5

DATE 8/12/73

POSITION 48-51.0N, 128-40.0W GMT 16.2

RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.74	32.35	0	25.11	286.3	0.0	0.0	1482.
10	8.73	32.35	10	25.11	286.6	0.29	0.01	1482.
20	8.73	32.35	20	25.11	286.6	0.57	0.06	1483.
30	8.71	32.35	30	25.11	286.5	0.86	0.13	1483.
50	8.67	32.37	50	25.14	284.7	1.43	0.36	1483.
75	7.32	32.72	75	25.61	240.4	2.12	0.80	1479.
100	6.89	33.09	99	25.95	207.6	2.68	1.30	1478.
125	6.92	33.52	124	26.29	176.0	3.15	1.84	1479.
150	6.91	33.68	149	26.42	164.5	3.57	2.43	1479.
175	6.70	33.80	174	26.54	153.2	3.97	3.08	1479.
200	6.46	33.84	199	26.60	147.2	4.34	3.80	1479.
225	6.13	33.87	223	26.67	141.4	4.70	4.58	1478.
250	5.83	33.88	248	26.71	137.2	5.05	5.42	1477.
300	5.35	33.89	298	26.78	131.1	5.72	7.29	1476.
400	4.69	33.98	397	26.93	117.9	6.96	11.71	1475.
500	4.44	34.09	496	27.04	107.7	8.09	16.86	1476.
600	4.07	34.17	595	27.15	98.5	9.11	22.62	1476.
800	3.76	34.29	793	27.27	87.8	10.98	35.87	1478.
1000	3.30	34.37	991	27.38	78.5	12.64	51.07	1479.
1200	2.91	34.42	1188	27.45	71.5	14.14	67.85	1481.



OFFSHORE OCEANOGRAPHY GROUP

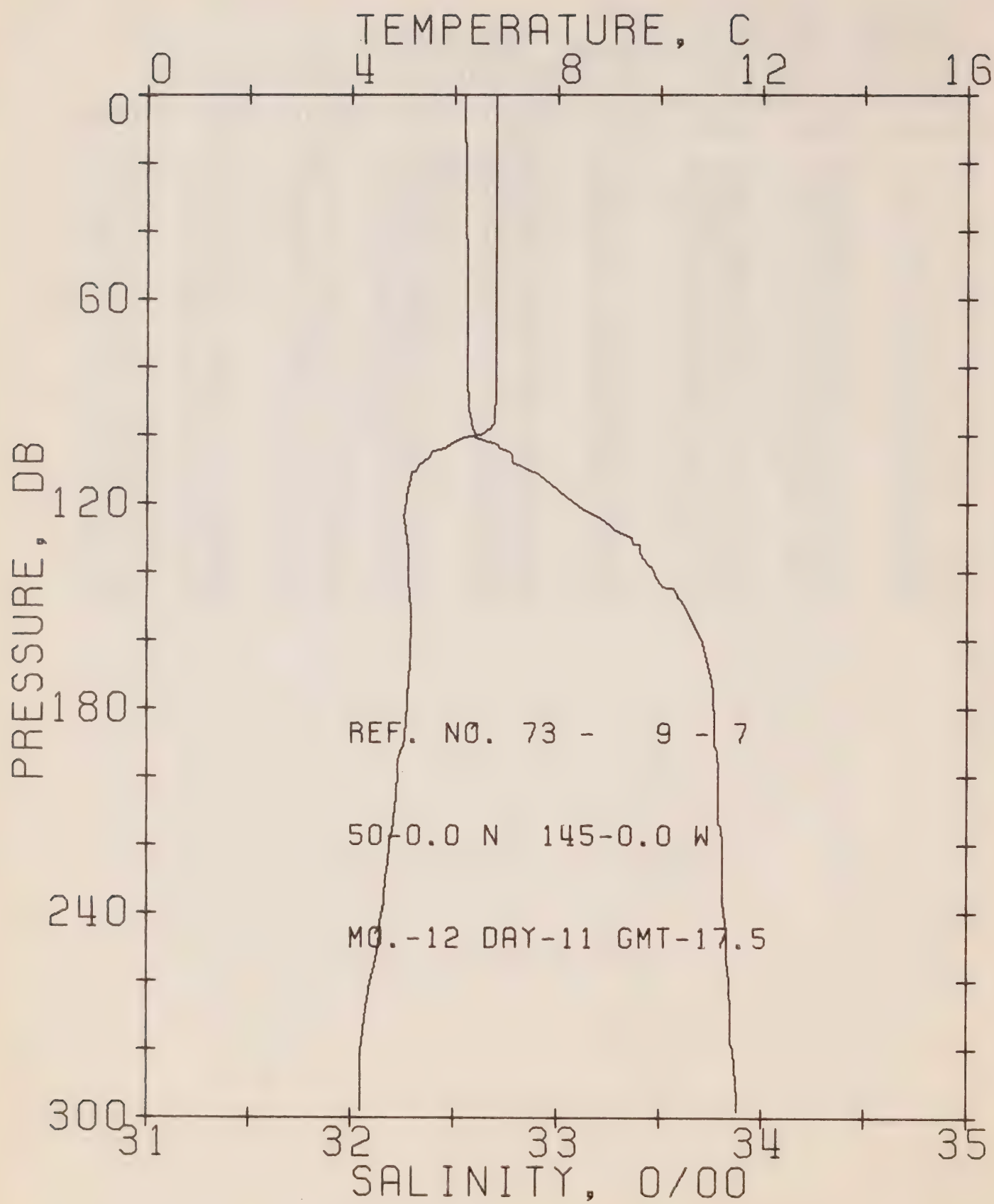
REFERENCE NO. 73- 9- 6

DATE 9/12/73

POSITION 49-26.0N, 136-40.0W GMT 17.1

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.41	32.43	0	25.37	261.9	0.0	0.0	1477.
10	7.41	32.43	10	25.37	261.8	0.26	0.01	1477.
20	7.41	32.44	20	25.37	261.6	0.52	0.05	1478.
30	7.41	32.44	30	25.38	261.4	0.79	0.12	1478.
50	7.40	32.45	50	25.38	261.2	1.31	0.33	1478.
75	7.40	32.45	75	25.38	261.5	1.96	0.75	1478.
100	7.03	32.46	99	25.44	256.3	2.61	1.33	1477.
125	5.73	33.24	124	26.22	182.3	3.13	1.92	1474.
150	5.62	33.59	149	26.51	155.1	3.56	2.52	1474.
175	5.38	33.76	174	26.67	139.9	3.92	3.12	1474.
200	5.16	33.81	199	26.74	133.9	4.26	3.77	1473.
225	4.94	33.82	223	26.77	130.9	4.59	4.49	1473.
250	4.77	33.84	248	26.81	127.9	4.92	5.27	1473.
300	4.61	33.90	298	26.87	122.0	5.54	7.01	1473.
400	4.21	34.00	397	26.99	111.1	6.69	11.13	1473.
500	4.05	34.08	496	27.08	104.1	7.77	16.04	1474.
600	3.84	34.14	595	27.14	98.2	8.77	21.68	1475.
800	3.35	34.26	793	27.29	85.5	10.59	34.62	1476.
1000	2.93	34.35	990	27.39	75.9	12.20	49.35	1478.
1200	2.70	34.40	1188	27.46	70.5	13.67	65.74	1480.



OFFSHORE OCEANOGRAPHY GROUP

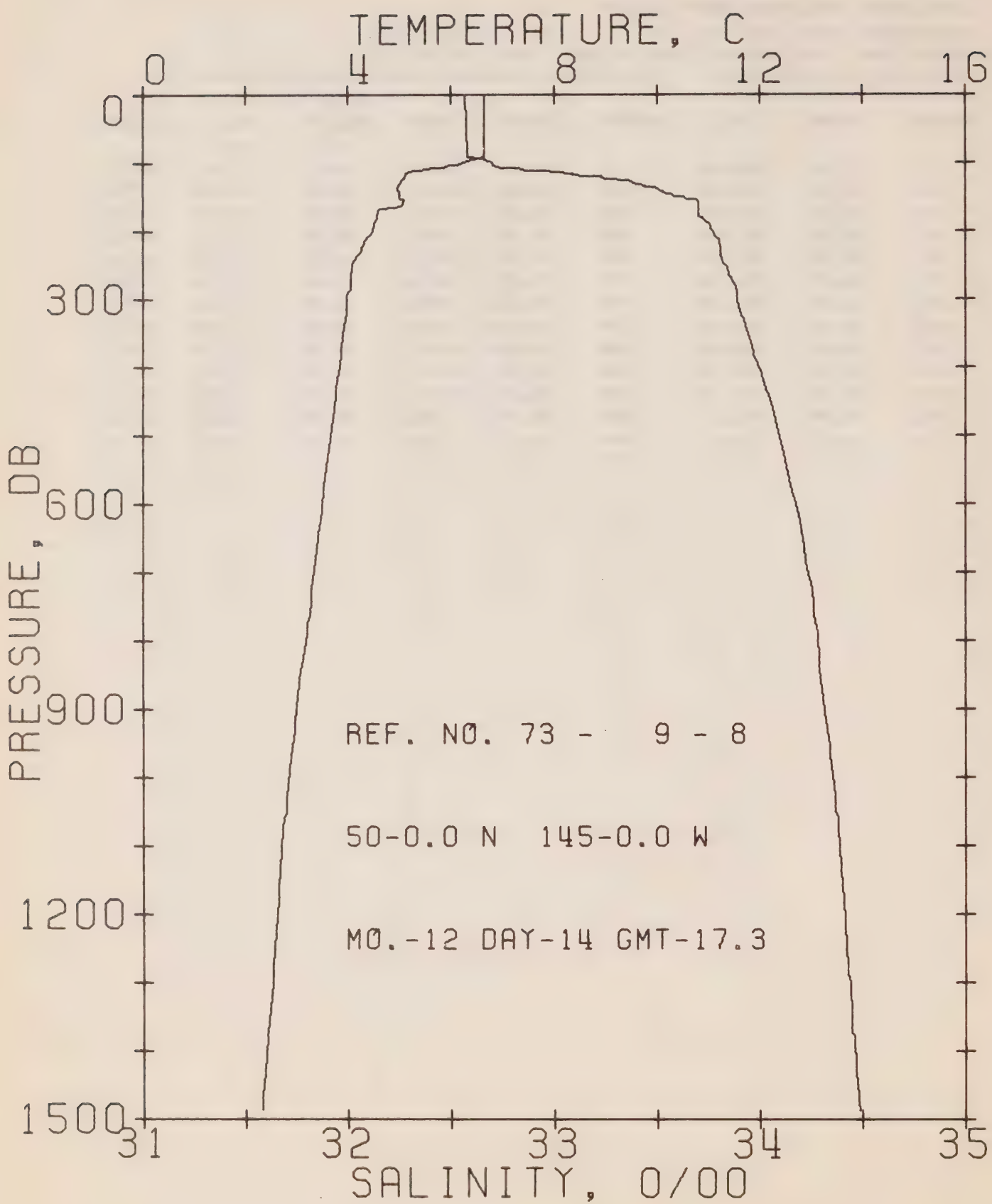
REFERENCE NO. 73- 9- 7

DATE 11/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 77 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.80	32.55	0	25.54	245.1	0.0	0.0	1475.
10	6.80	32.55	10	25.54	245.3	0.25	0.01	1475.
20	6.80	32.55	20	25.55	245.4	0.49	0.05	1475.
30	6.80	32.56	30	25.55	245.3	0.74	0.11	1476.
50	6.80	32.56	50	25.55	245.3	1.23	0.31	1476.
75	6.80	32.56	75	25.55	245.5	1.84	0.70	1476.
100	6.51	32.60	99	25.62	239.3	2.45	1.25	1476.
125	5.04	33.23	124	26.29	175.1	2.96	1.83	1471.
150	5.17	33.62	149	26.58	147.9	3.36	2.39	1472.
175	5.10	33.76	174	26.70	136.9	3.71	2.97	1473.
200	4.89	33.79	199	26.75	132.3	4.05	3.62	1472.
225	4.70	33.81	223	26.79	129.1	4.38	4.33	1472.
250	4.53	33.83	248	26.83	125.9	4.70	5.10	1472.



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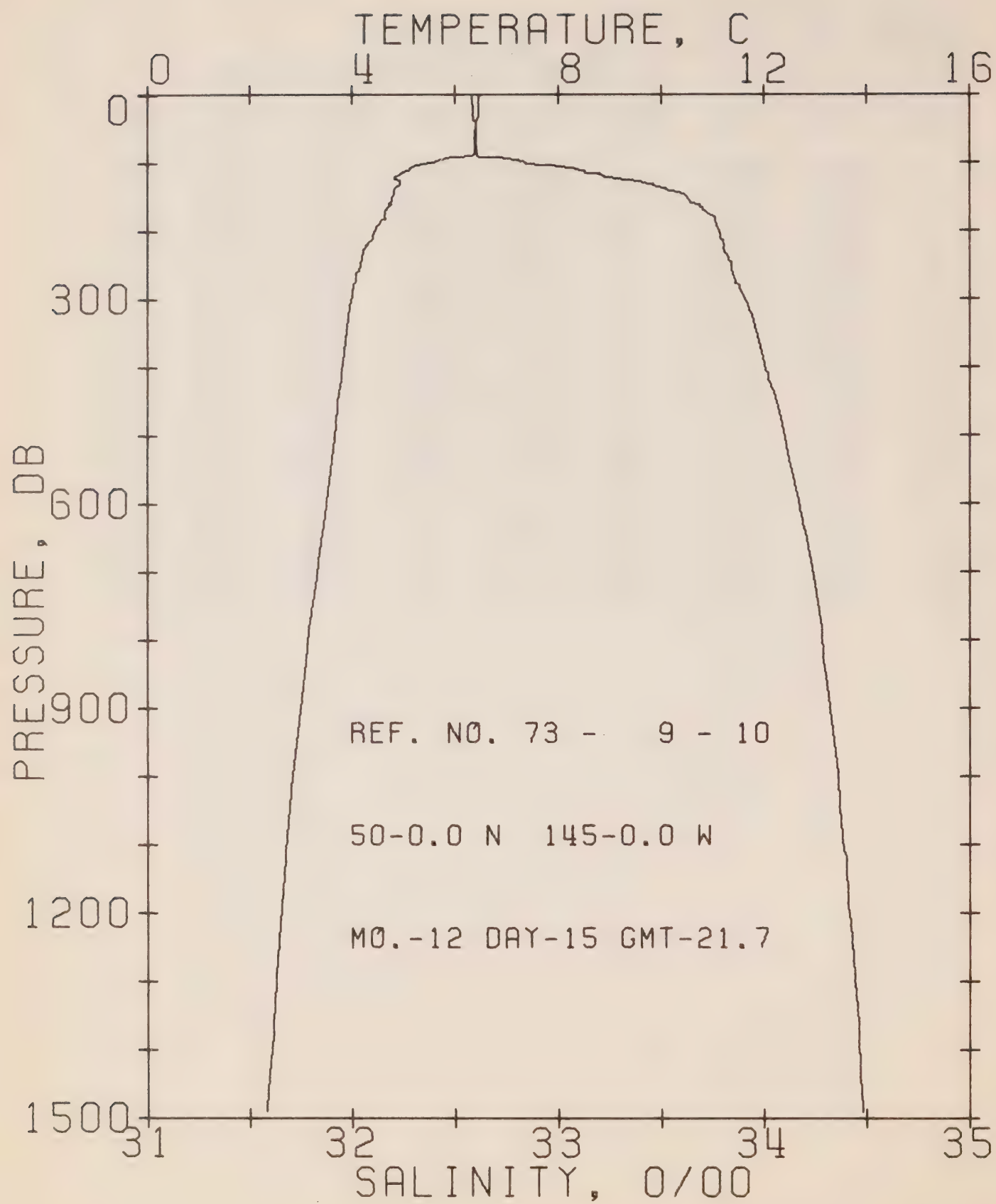
REFERENCE NO. 73- 9- 8

DATE 14/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STD CAST 128 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.64	32.57	0	25.58	241.6	0.0	0.0	1474.
10	6.64	32.57	10	25.58	241.9	0.24	0.01	1475.
20	6.64	32.57	20	25.58	241.9	0.48	0.05	1475.
30	6.64	32.57	30	25.58	241.9	0.73	0.11	1475.
50	6.64	32.58	50	25.58	242.0	1.21	0.31	1475.
75	6.64	32.58	75	25.59	242.1	1.81	0.69	1476.
100	6.25	32.70	99	25.73	228.5	2.41	1.23	1475.
125	5.05	33.34	124	26.38	167.0	2.92	1.80	1471.
150	4.99	33.60	149	26.59	147.2	3.31	2.35	1472.
175	4.58	33.70	174	26.72	135.5	3.66	2.92	1470.
200	4.47	33.77	199	26.78	129.2	3.99	3.56	1470.
225	4.26	33.81	223	26.84	124.3	4.30	4.24	1470.
250	4.09	33.83	248	26.87	121.5	4.61	4.99	1470.
300	3.97	33.89	298	26.93	115.9	5.20	6.64	1470.
400	3.83	34.00	397	27.03	107.4	6.32	10.63	1471.
500	3.66	34.09	496	27.12	99.2	7.35	15.35	1472.
600	3.50	34.17	595	27.20	92.1	8.31	20.70	1473.
800	3.16	34.28	793	27.32	81.9	10.04	33.03	1475.
1000	2.85	34.36	990	27.41	74.2	11.61	47.35	1477.
1200	2.61	34.41	1188	27.48	68.6	13.03	63.29	1480.



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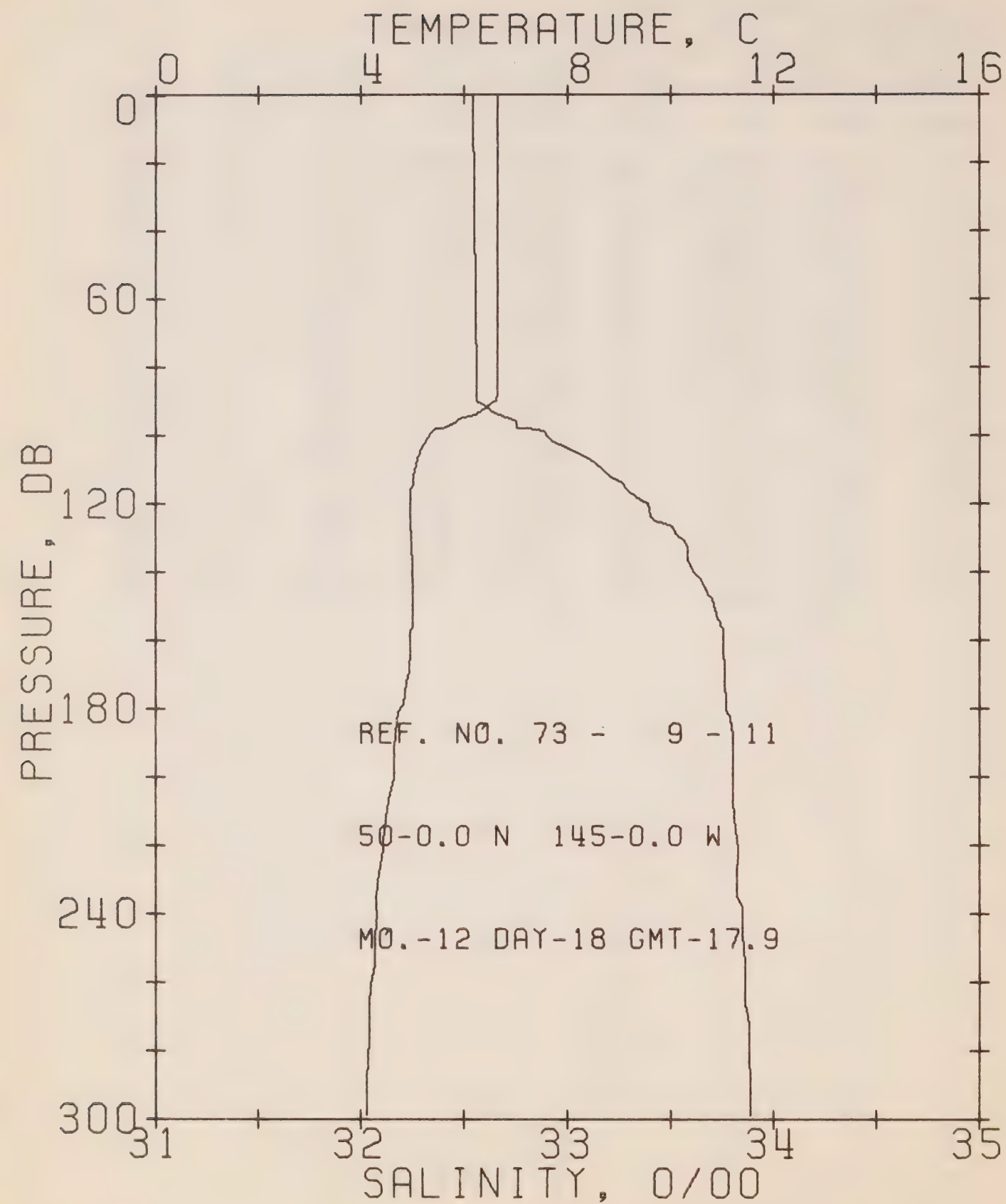
REFERENCE NO. 73- 9- 10

DATE 15/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 21.7

RESULTS OF STP CAST 149 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.51	32.58	0	25.60	239.3	0.0	0.0	1474.
10	6.46	32.58	10	25.61	238.8	0.24	0.01	1474.
20	6.46	32.59	20	25.62	238.6	0.48	0.05	1474.
30	6.45	32.59	30	25.62	238.5	0.72	0.11	1474.
50	6.39	32.60	50	25.64	237.1	1.19	0.30	1474.
75	6.37	32.60	75	25.64	237.2	1.78	0.68	1475.
100	5.57	32.84	99	25.92	210.1	2.36	1.19	1472.
125	4.98	33.31	124	26.37	167.5	2.82	1.72	1470.
150	4.78	33.62	149	26.63	143.3	3.20	2.25	1471.
175	4.64	33.72	174	26.73	134.2	3.55	2.83	1471.
200	4.46	33.78	199	26.79	128.4	3.88	3.45	1470.
225	4.26	33.81	223	26.84	124.6	4.19	4.14	1470.
250	4.16	33.84	248	26.87	121.2	4.50	4.88	1470.
300	3.98	33.91	298	26.95	114.5	5.09	6.54	1470.
400	3.81	34.01	397	27.04	106.3	6.19	10.45	1471.
500	3.65	34.10	496	27.13	98.5	7.21	15.13	1472.
600	3.49	34.17	595	27.20	92.2	8.17	20.47	1473.
800	3.13	34.28	793	27.33	81.4	9.89	32.74	1475.
1000	2.84	34.36	990	27.41	73.8	11.44	46.96	1477.
1200	2.61	34.41	1188	27.48	68.5	12.87	62.86	1480.



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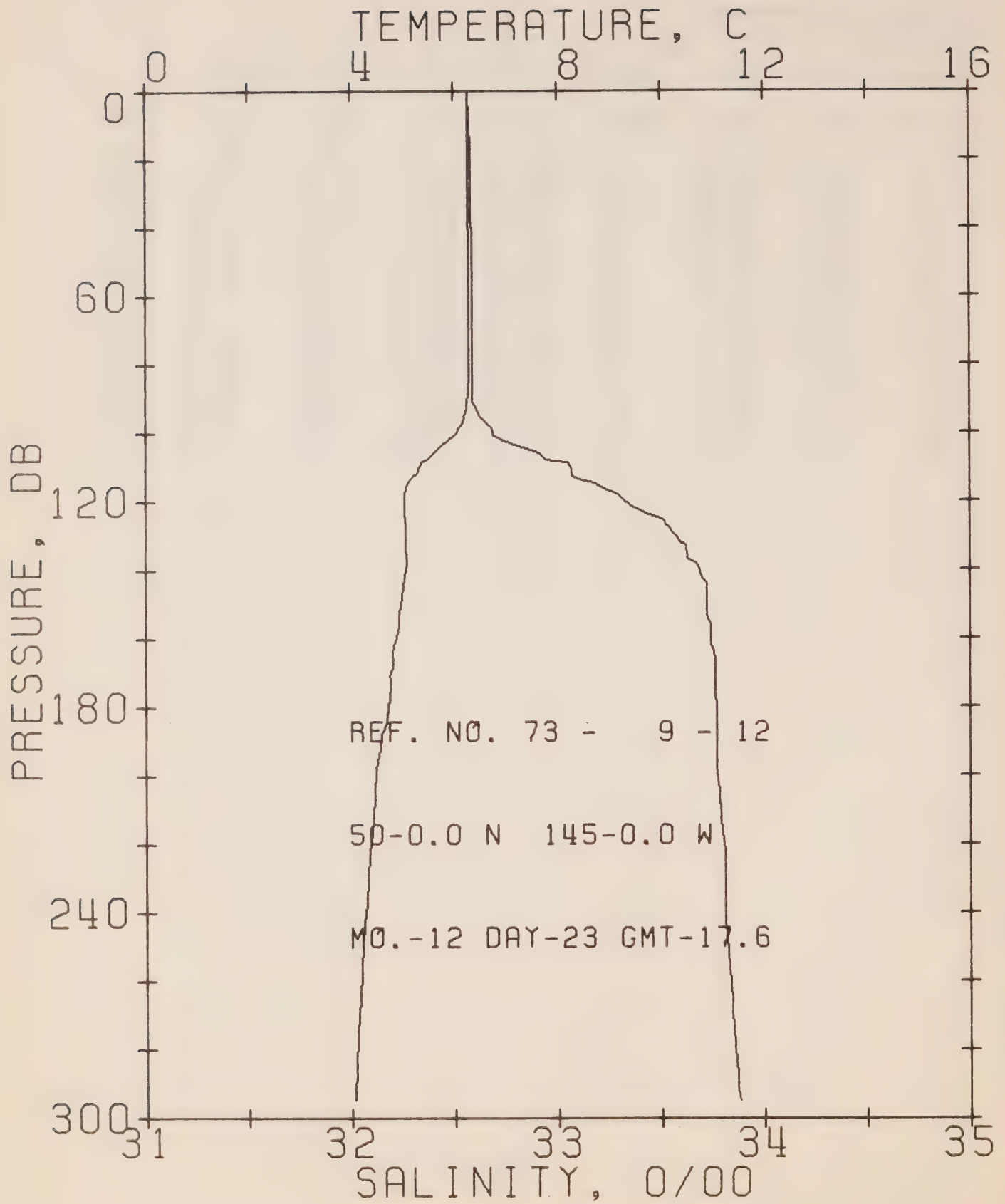
REFERENCE NO. 73- 9- 11

DATE 18/12/73

POSITION 52- 0.0N, 145- 0.0W GMT 17.9

RESULTS OF STP CAST 75 PCINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.64	32.54	0	25.56	243.9	0.0	0.0	1474.
10	6.64	32.54	10	25.56	244.0	0.24	0.01	1475.
20	6.64	32.55	20	25.56	243.9	0.49	0.05	1475.
30	6.64	32.55	30	25.56	243.8	0.73	0.11	1475.
50	6.64	32.55	50	25.57	243.7	1.22	0.31	1475.
75	6.63	32.56	75	25.57	243.6	1.83	0.70	1476.
100	5.33	32.89	99	26.00	203.2	2.42	1.22	1471.
125	4.96	33.42	124	26.45	160.0	2.86	1.73	1471.
150	5.02	33.71	149	26.68	139.3	3.23	2.24	1472.
175	4.86	33.76	174	26.74	133.7	3.57	2.81	1472.
200	4.64	33.80	199	26.79	128.9	3.89	3.43	1471.
225	4.38	33.83	223	26.84	124.4	4.21	4.11	1471.
250	4.27	33.85	248	26.87	121.3	4.52	4.86	1471.



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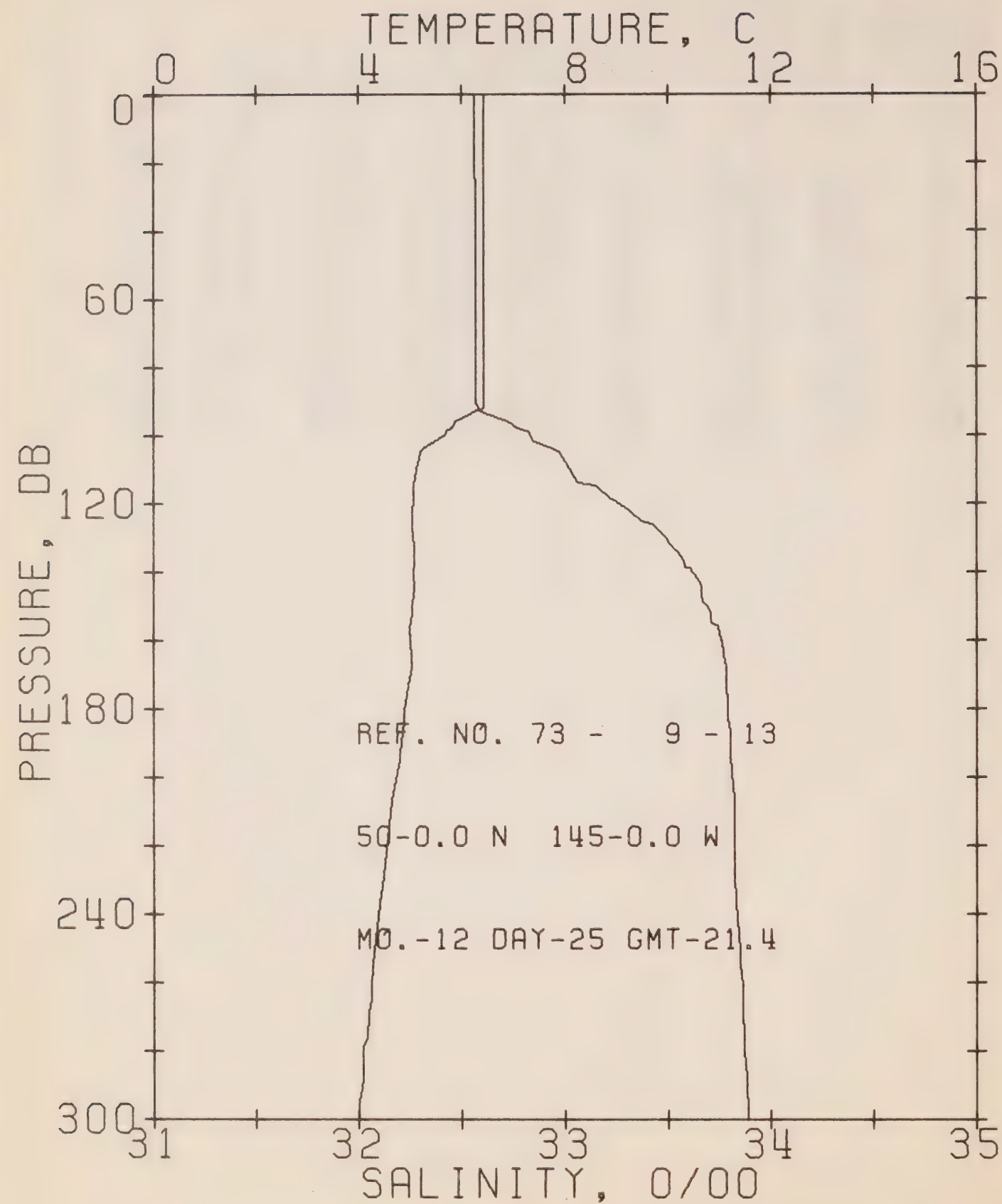
REFERENCE NO. 73- 9- 12

DATE 23/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 17.6

RESULTS OF STP CAST 76 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.28	32.57	0	25.62	237.3	0.0	0.0	1473.
10	6.28	32.58	10	25.63	237.2	0.24	0.01	1473.
20	6.28	32.58	20	25.63	236.9	0.47	0.05	1473.
30	6.28	32.58	30	25.63	236.9	0.71	0.11	1474.
50	6.29	32.59	50	25.64	236.9	1.19	0.30	1474.
75	6.29	32.59	75	25.64	237.0	1.78	0.68	1474.
100	6.05	32.69	99	25.75	226.9	2.37	1.20	1474.
125	5.06	33.50	124	26.51	155.2	2.84	1.74	1471.
150	4.97	33.72	149	26.69	138.0	3.20	2.25	1472.
175	4.76	33.76	174	26.75	132.8	3.54	2.81	1471.
200	4.47	33.77	199	26.79	129.1	3.86	3.43	1470.
225	4.33	33.81	223	26.83	125.1	4.18	4.12	1470.
250	4.22	33.82	248	26.85	123.3	4.49	4.87	1470.



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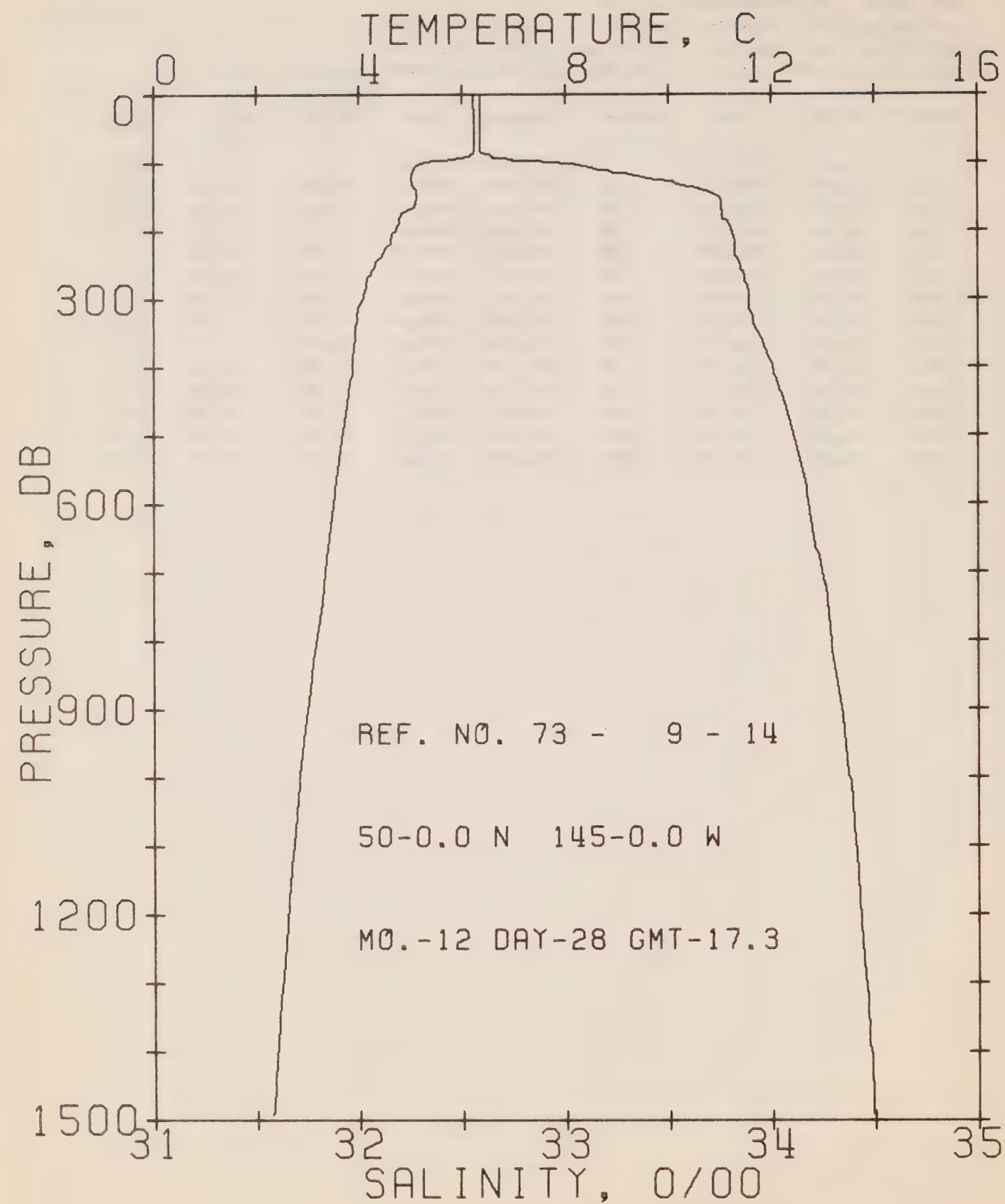
REFERENCE NO. 73- 9- 13

DATE 25/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 21.4

RESULTS OF STP CAST 71 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.44	32.56	0	25.60	239.9	0.0	0.0	1474.
10	6.44	32.56	10	25.60	240.1	0.24	0.01	1474.
20	6.43	32.56	20	25.60	240.0	0.48	0.05	1474.
30	6.43	32.57	30	25.60	239.9	0.72	0.11	1474.
50	6.42	32.57	50	25.61	239.7	1.20	0.31	1474.
75	6.42	32.57	75	25.61	240.0	1.80	0.69	1475.
100	5.67	32.83	99	25.90	212.0	2.39	1.21	1472.
125	5.03	33.37	124	26.41	164.6	2.85	1.74	1471.
150	5.03	33.69	149	26.66	140.9	3.23	2.27	1472.
175	4.95	33.78	174	26.74	133.2	3.57	2.83	1472.
200	4.74	33.81	199	26.79	129.1	3.90	3.46	1472.
225	4.52	33.82	223	26.82	126.3	4.22	4.15	1471.
250	4.30	33.85	248	26.86	122.0	4.53	4.90	1471.
300	4.00	33.89	298	26.93	116.2	5.12	6.57	1470.



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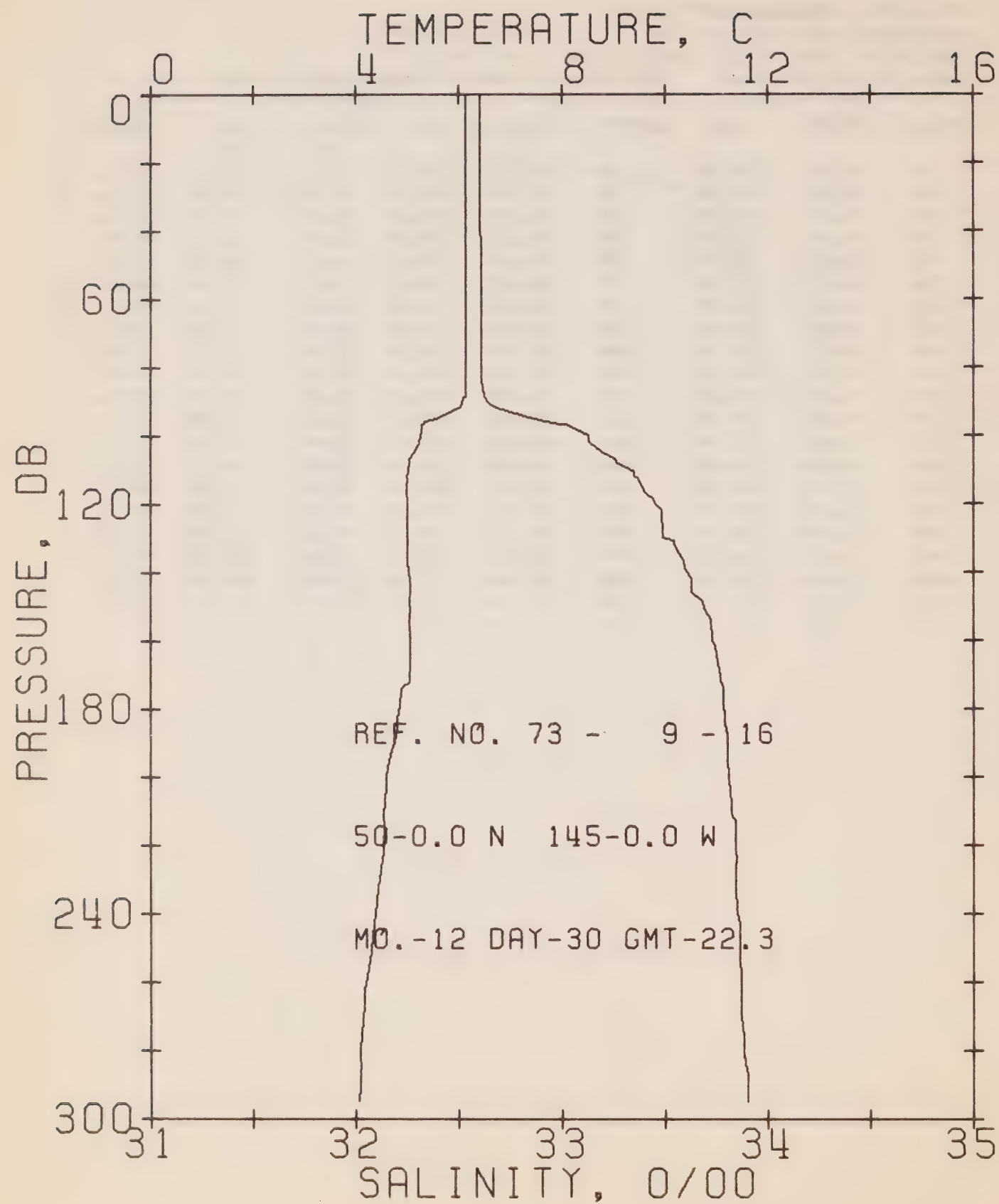
REFERENCE NO. 73- 9- 14

DATE 28/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 109 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.22	32.59	0	25.65	235.0	0.0	0.0	1473.
10	6.22	32.59	10	25.65	235.4	0.24	0.01	1473.
20	6.23	32.59	20	25.65	235.6	0.47	0.05	1473.
30	6.23	32.59	30	25.65	235.7	0.71	0.11	1473.
50	6.23	32.59	50	25.65	236.0	1.18	0.30	1474.
75	6.23	32.59	75	25.65	236.3	1.77	0.68	1474.
100	5.31	32.94	99	26.03	199.6	2.34	1.19	1471.
125	5.00	33.44	124	26.46	159.0	2.78	1.69	1471.
150	5.13	33.74	149	26.69	138.2	3.15	2.21	1472.
175	4.92	33.76	174	26.74	133.6	3.49	2.77	1471.
200	4.70	33.80	199	26.78	129.3	3.82	3.40	1471.
225	4.51	33.82	223	26.82	126.2	4.14	4.09	1471.
250	4.31	33.84	248	26.86	122.4	4.45	4.84	1471.
300	4.06	33.89	298	26.92	116.8	5.05	6.51	1471.
400	3.87	34.00	397	27.03	107.3	6.17	10.52	1471.
500	3.66	34.11	496	27.13	98.2	7.20	15.22	1472.
600	3.49	34.18	595	27.21	91.7	8.15	20.52	1473.
800	3.16	34.29	793	27.33	81.4	9.87	32.78	1475.
1000	2.84	34.37	990	27.42	73.0	11.41	46.86	1477.
1200	2.59	34.43	1188	27.49	67.4	12.81	62.53	1480.



OFFSHORE OCEANOGRAPHY GROUP

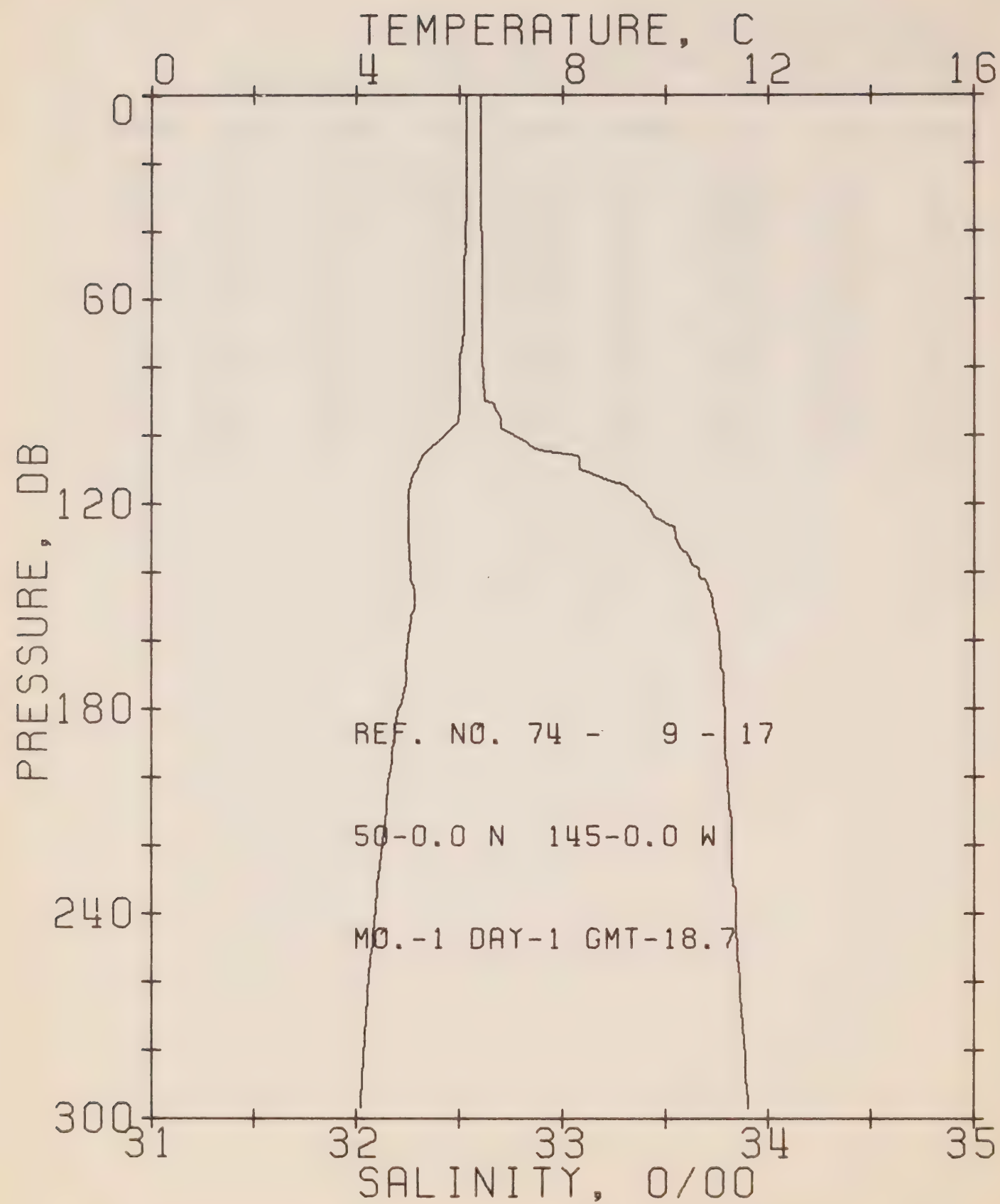
REFERENCE NO. 73- 9- 16

DATE 30/12/73

POSITION 50- 0.0N, 145- 0.0W GMT 22.3

RESULTS OF STP CAST 83 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.13	32.60	0	25.67	233.2	0.0	0.0	1472.
10	6.13	32.60	10	25.67	233.4	0.23	0.01	1473.
20	6.13	32.60	20	25.67	233.5	0.47	0.05	1473.
30	6.13	32.60	30	25.67	233.5	0.70	0.11	1473.
50	6.12	32.61	50	25.67	233.5	1.17	0.30	1473.
75	6.12	32.61	75	25.68	233.5	1.75	0.67	1474.
100	5.24	33.13	99	26.19	184.6	2.31	1.17	1471.
125	5.01	33.48	124	26.50	155.8	2.73	1.64	1471.
150	5.06	33.68	149	26.65	141.5	3.10	2.17	1472.
175	4.88	33.78	174	26.75	132.7	3.44	2.73	1472.
200	4.59	33.81	199	26.80	127.6	3.77	3.36	1471.
225	4.50	33.85	223	26.84	124.1	4.09	4.04	1471.
250	4.30	33.86	248	26.87	121.2	4.39	4.78	1471.



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REFERENCE NO. 74- 9- 17

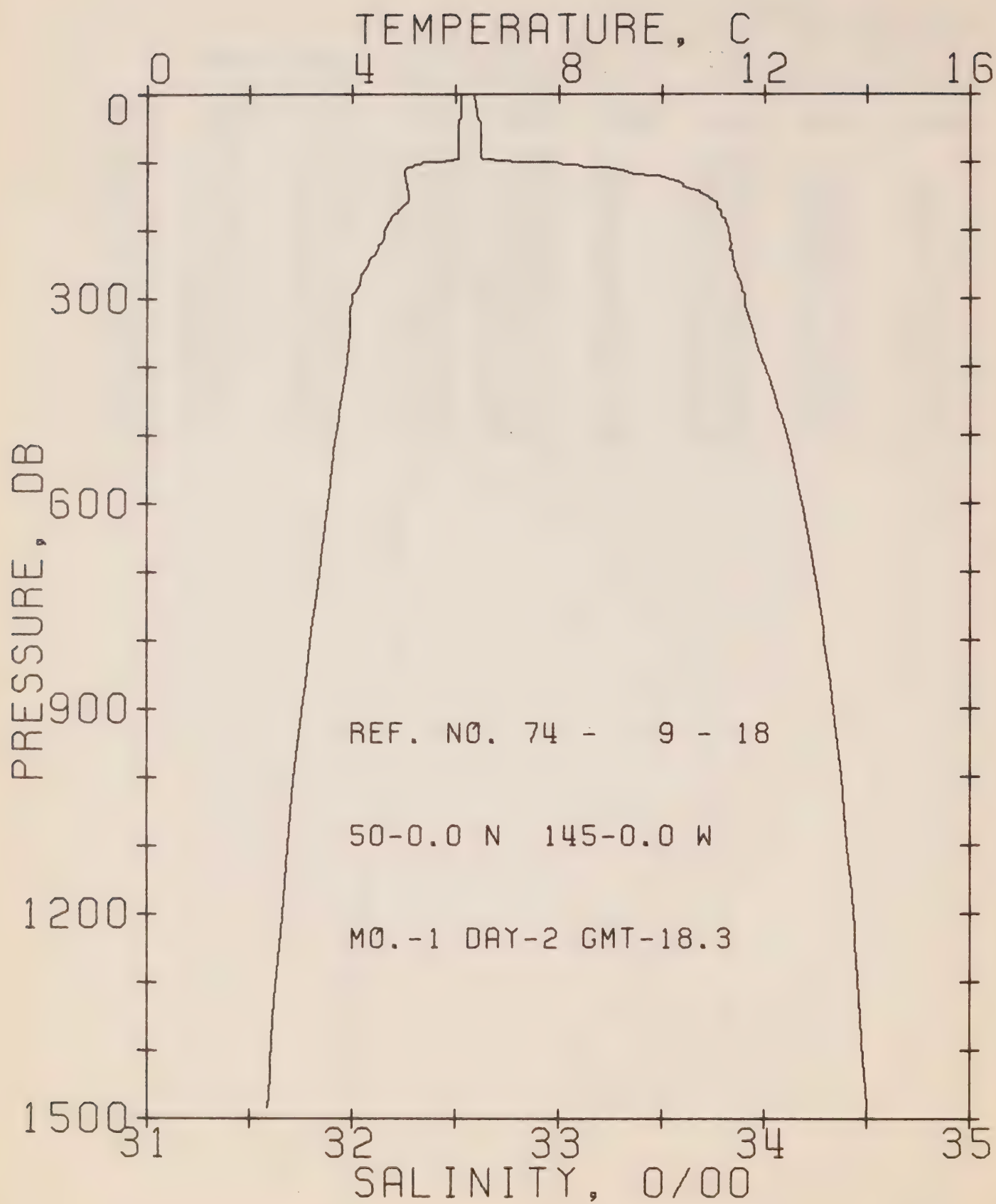
DATE 1/ 1/74

POSITION 50- 0.0N, 145- 0.0W

GMT 18.7

RESULTS OF STP CAST 85 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.13	32.60	0	25.67	233.2	0.0	0.0	1472.
10	6.13	32.60	10	25.67	233.6	0.23	0.01	1473.
20	6.14	32.60	20	25.67	233.7	0.47	0.05	1473.
30	6.14	32.60	30	25.67	233.8	0.70	0.11	1473.
50	6.09	32.61	50	25.68	232.7	1.17	0.30	1473.
75	6.03	32.61	75	25.69	232.4	1.75	0.67	1473.
100	5.71	32.76	99	25.84	217.7	2.32	1.18	1473.
125	5.00	33.49	124	26.50	155.3	2.77	1.69	1471.
150	5.15	33.73	149	26.68	139.2	3.14	2.20	1472.
175	4.93	33.78	174	26.74	133.3	3.48	2.76	1472.
200	4.63	33.80	199	26.79	128.7	3.80	3.39	1471.
225	4.47	33.82	223	26.82	125.7	4.12	4.08	1471.
250	4.31	33.85	248	26.86	122.0	4.43	4.82	1471.



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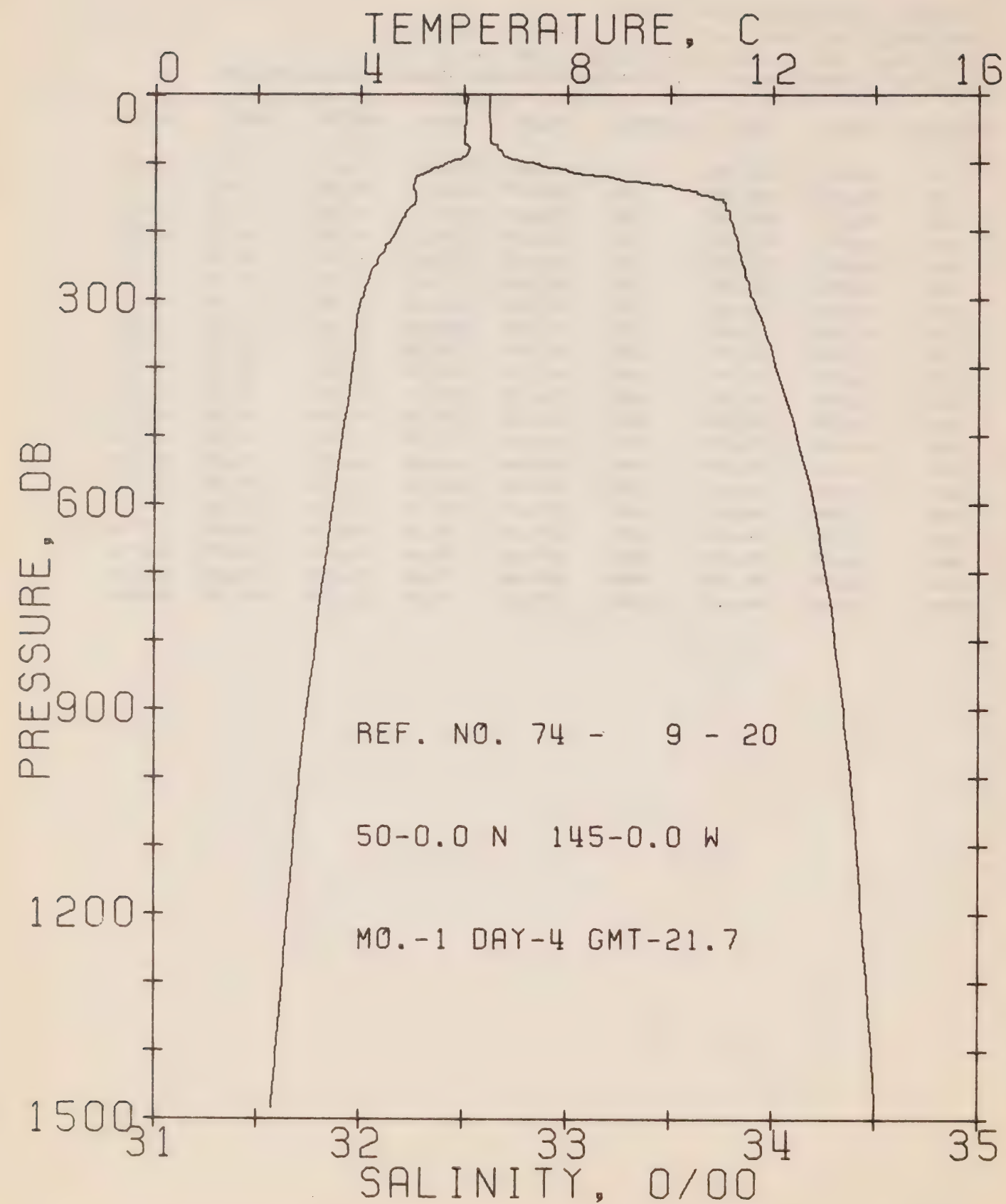
REFERENCE NO. 74- 9- 18

DATE 2/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.3

RESULTS OF STP CAST 114 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.10	32.59	0	25.66	233.7	0.0	0.0	1472.
10	6.10	32.59	10	25.67	233.8	0.23	0.01	1472.
20	6.11	32.60	20	25.67	233.6	0.47	0.05	1473.
30	6.10	32.60	30	25.67	233.5	0.70	0.11	1473.
50	6.05	32.62	50	25.69	231.5	1.17	0.30	1473.
75	6.05	32.62	75	25.69	231.8	1.74	0.67	1473.
100	5.65	32.87	99	25.94	208.8	2.32	1.18	1472.
125	5.04	33.54	124	26.54	151.9	2.75	1.67	1471.
150	5.10	33.71	149	26.67	139.8	3.12	2.18	1472.
175	4.84	33.79	174	26.76	131.5	3.45	2.74	1472.
200	4.62	33.82	199	26.81	127.1	3.78	3.36	1471.
225	4.50	33.84	223	26.83	124.9	4.09	4.04	1471.
250	4.30	33.85	248	26.87	121.9	4.40	4.79	1471.
300	4.00	33.90	298	26.94	115.4	4.99	6.44	1470.
400	3.88	34.00	397	27.03	107.6	6.11	10.43	1472.
500	3.68	34.11	496	27.13	98.3	7.14	15.14	1472.
600	3.52	34.18	595	27.21	91.8	8.09	20.45	1474.
800	3.17	34.29	793	27.33	81.4	9.82	32.73	1475.
1000	2.87	34.37	990	27.42	73.1	11.36	46.84	1478.
1200	2.64	34.43	1188	27.49	67.4	12.76	62.57	1480.



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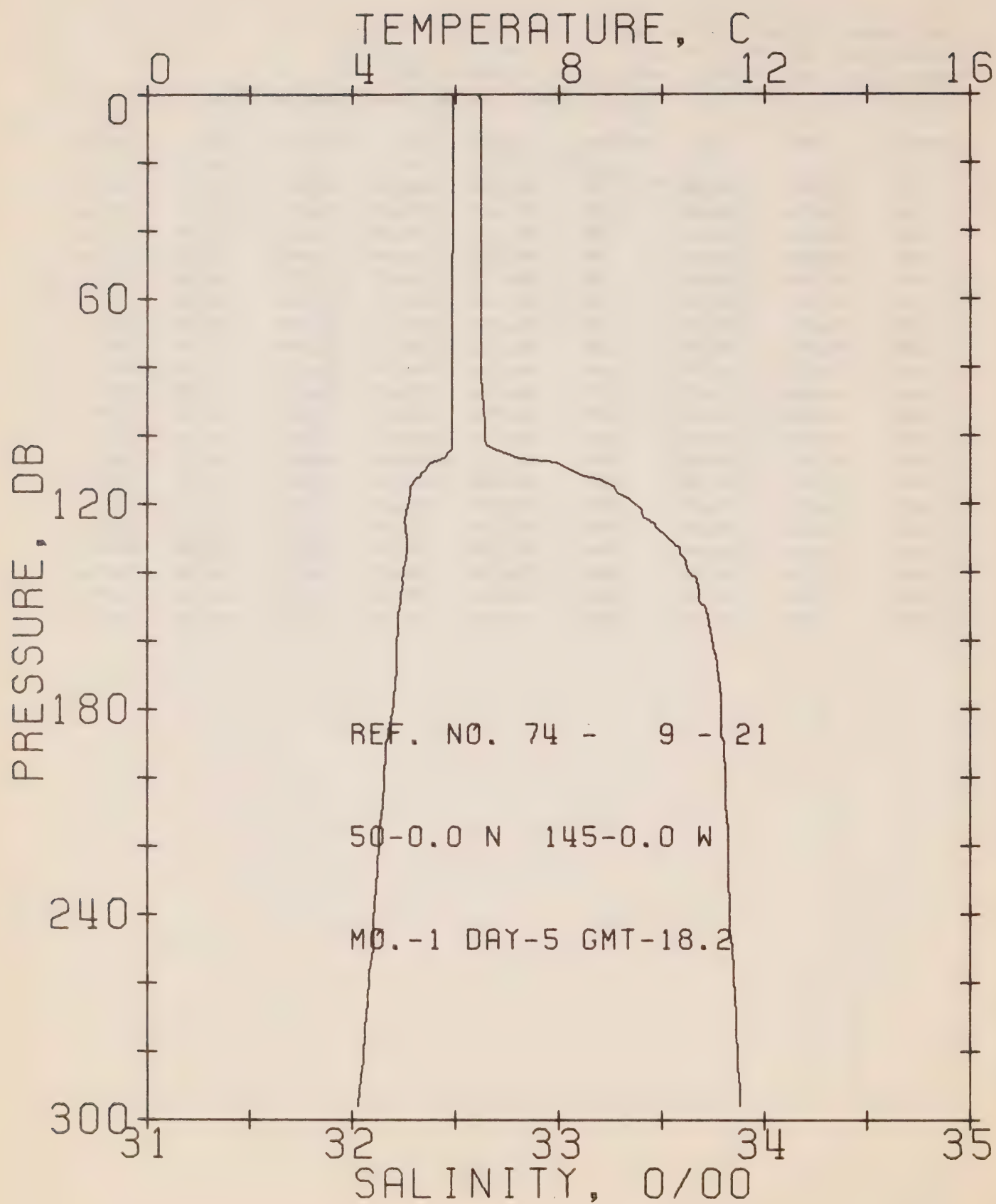
REFERENCE NO. 74- 9- 20

DATE 4/ 1/74

POSITION: 50- 0.0N, 145- 0.0W GMT 21.7

RESULTS OF STP CAST 121 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.05	32.62	0	25.69	230.8	0.0	0.0	1472.
10	6.04	32.62	10	25.69	231.0	0.23	0.01	1472.
20	6.03	32.62	20	25.70	230.9	0.46	0.05	1472.
30	6.03	32.62	30	25.70	230.8	0.69	0.11	1473.
50	6.02	32.63	50	25.70	230.7	1.15	0.29	1473.
75	6.07	32.66	75	25.72	229.1	1.73	0.66	1473.
100	5.70	32.82	99	25.89	213.1	2.29	1.16	1473.
125	5.05	33.26	124	26.32	173.1	2.78	1.72	1471.
150	5.07	33.70	149	26.66	140.5	3.17	2.26	1472.
175	4.86	33.79	174	26.76	131.8	3.50	2.82	1472.
200	4.68	33.81	199	26.79	128.5	3.83	3.44	1471.
225	4.47	33.83	223	26.83	125.1	4.15	4.13	1471.
250	4.29	33.85	248	26.87	121.8	4.46	4.87	1471.
300	4.00	33.90	298	26.94	115.4	5.05	6.53	1470.
400	3.85	34.01	397	27.04	106.4	6.15	10.46	1471.
500	3.66	34.11	496	27.14	97.7	7.17	15.12	1472.
600	3.48	34.20	595	27.22	90.1	8.11	20.36	1473.
800	3.14	34.30	793	27.34	80.0	9.80	32.40	1475.
1000	2.82	34.38	990	27.43	72.2	11.32	46.32	1477.
1200	2.59	34.43	1188	27.49	66.8	12.70	61.82	1480.



OFFSHORE OCEANOGRAPHY GROUP

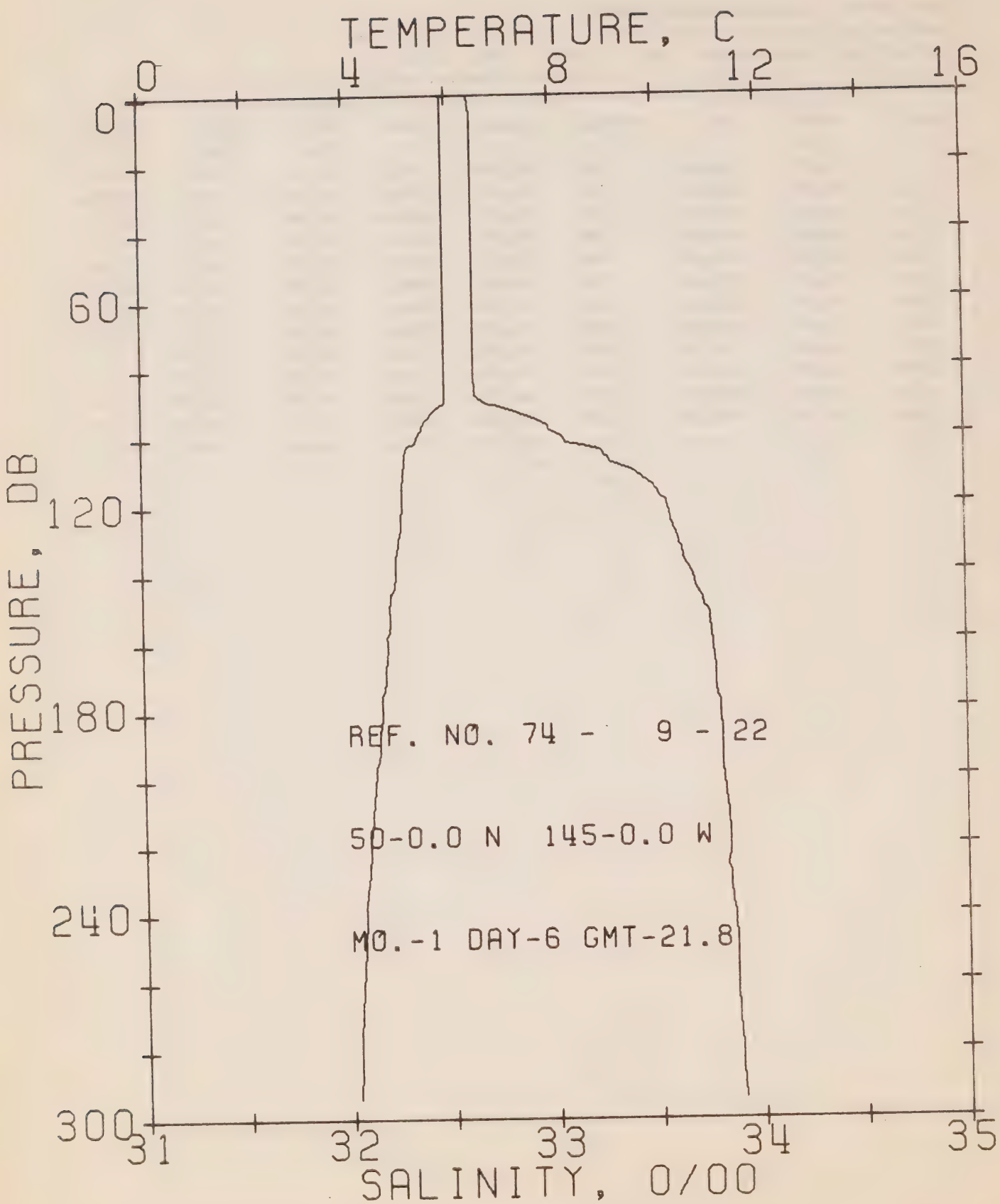
REFERENCE NO. 74- 9- 21

DATE 5/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.2

RESULTS OF STP CAST 65 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.96	32.61	0	25.70	230.5	0.0	0.0	1472.
10	5.94	32.62	10	25.71	229.8	0.23	0.01	1472.
20	5.94	32.62	20	25.71	229.9	0.46	0.05	1472.
30	5.94	32.62	30	25.71	230.0	0.69	0.11	1472.
50	5.93	32.62	50	25.71	230.2	1.15	0.29	1472.
75	5.93	32.62	75	25.71	230.4	1.73	0.66	1473.
100	5.93	32.64	99	25.72	229.3	2.30	1.17	1473.
125	5.01	33.44	124	26.46	159.1	2.78	1.71	1471.
150	4.90	33.71	149	26.69	138.0	3.14	2.23	1471.
175	4.81	33.79	174	26.76	131.5	3.48	2.78	1471.
200	4.61	33.81	199	26.80	127.8	3.80	3.40	1471.
225	4.48	33.82	223	26.82	125.9	4.12	4.09	1471.
250	4.39	33.84	248	26.85	123.6	4.43	4.85	1471.



OFFSHORE OCEANOGRAPHY GROUP

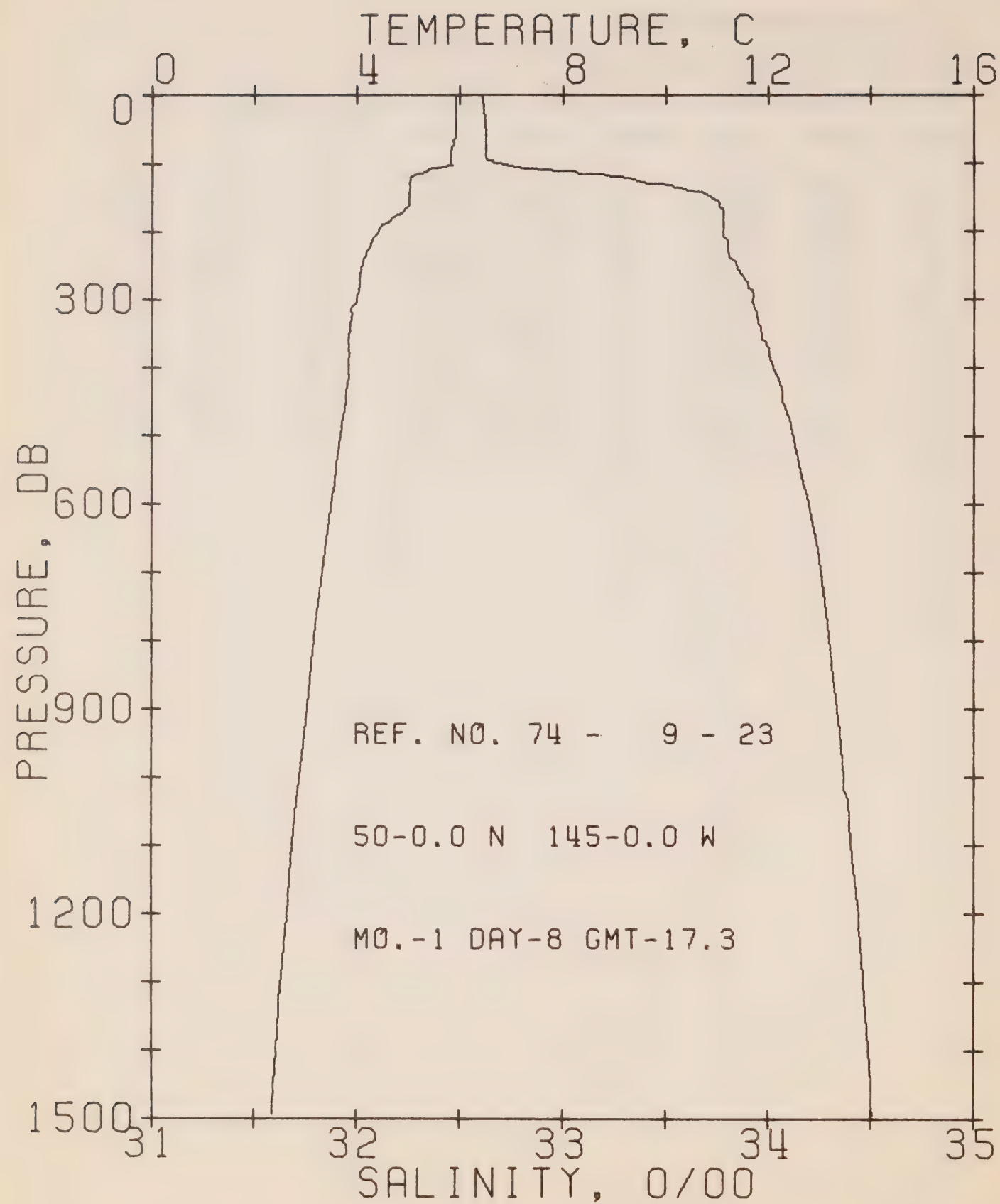
REFERENCE NO. 74- 9- 22

DATE 6/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 21.8

RESULTS OF STP CAST 79 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	PCT. EN	SOUND
0	5.91	32.61	0	25.70	229.9	0.0	0.0	1472.
10	5.91	32.62	10	25.71	229.5	0.23	0.01	1472.
20	5.91	32.62	20	25.71	229.7	0.46	0.05	1472.
30	5.91	32.62	30	25.71	229.8	0.69	0.11	1472.
50	5.91	32.62	50	25.71	230.0	1.15	0.29	1472.
75	5.91	32.62	75	25.71	230.2	1.72	0.66	1473.
100	5.37	33.05	99	26.11	192.1	2.28	1.15	1472.
125	5.05	33.57	124	26.56	149.8	2.69	1.62	1471.
150	4.81	33.73	149	26.72	135.4	3.04	2.12	1471.
175	4.67	33.78	174	26.77	130.1	3.37	2.66	1471.
200	4.50	33.81	199	26.82	126.3	3.69	3.27	1471.
225	4.35	33.83	223	26.85	123.5	4.00	3.95	1470.
250	4.23	33.87	248	26.89	119.7	4.31	4.68	1470.



OFFSHORE OCEANOGRAPHY GROUP

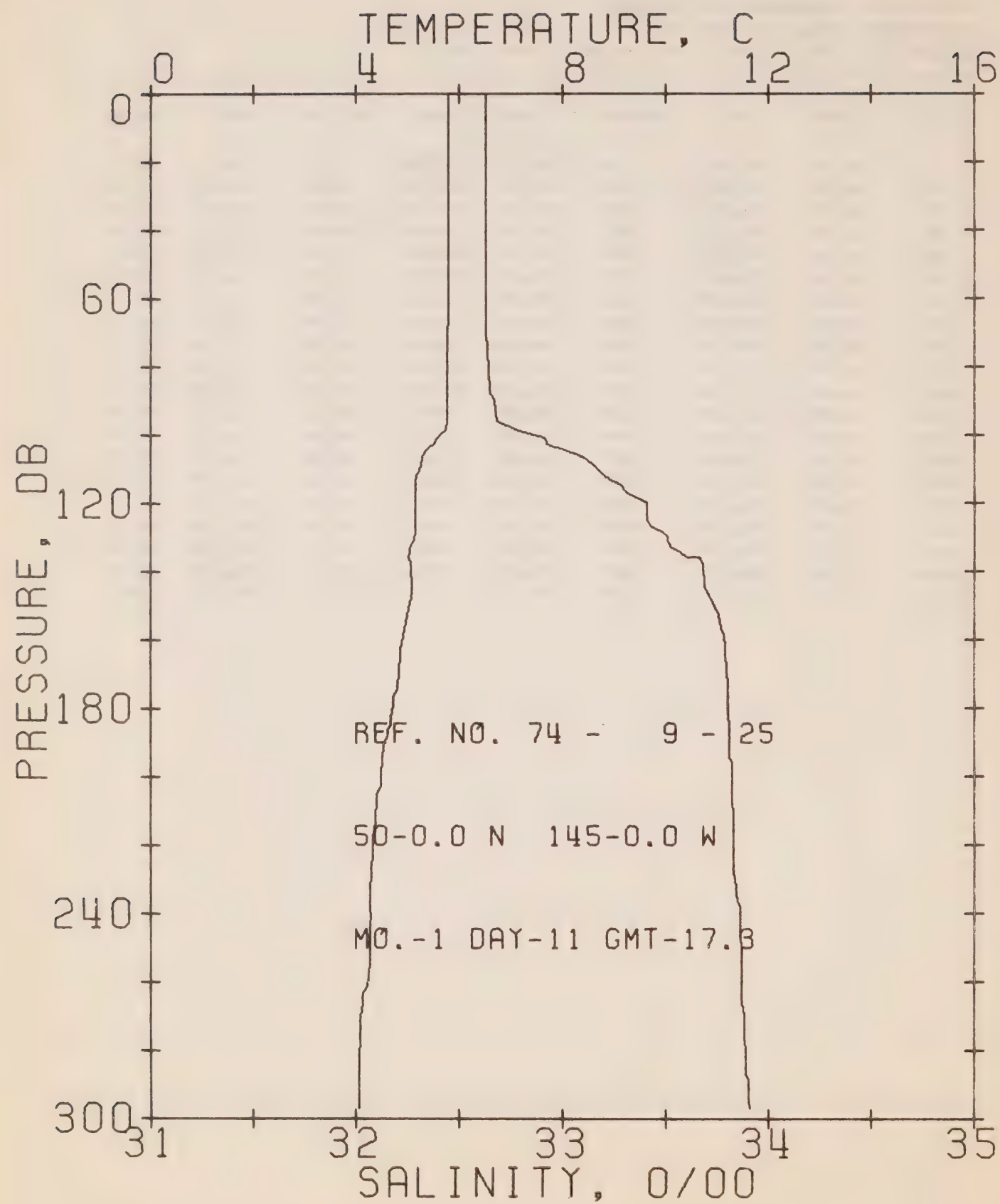
REFERENCE NO. 74- 9- 23

DATE 8/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 136 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.91	32.61	0	25.70	229.9	0.0	0.0	1472.
10	5.91	32.61	10	25.70	230.1	0.23	0.01	1472.
20	5.91	32.61	20	25.71	230.0	0.46	0.05	1472.
30	5.91	32.62	30	25.71	229.8	0.69	0.11	1472.
50	5.91	32.63	50	25.71	229.5	1.15	0.29	1472.
75	5.86	32.63	75	25.72	228.9	1.72	0.66	1473.
100	5.81	32.67	99	25.76	225.6	2.29	1.17	1473.
125	5.03	33.35	124	26.39	166.1	2.78	1.72	1471.
150	5.02	33.72	149	26.68	138.5	3.15	2.24	1472.
175	4.79	33.78	174	26.76	131.8	3.49	2.80	1471.
200	4.43	33.78	199	26.80	128.0	3.82	3.42	1470.
225	4.23	33.80	223	26.83	124.7	4.13	4.11	1470.
250	4.10	33.84	248	26.88	120.3	4.44	4.85	1470.
300	4.01	33.92	298	26.95	113.8	5.02	6.48	1470.
400	3.84	34.02	397	27.05	105.4	6.11	10.37	1471.
500	3.68	34.12	496	27.14	97.2	7.12	15.00	1473.
600	3.50	34.20	595	27.22	90.3	8.06	20.26	1473.
800	3.16	34.30	793	27.33	80.8	9.77	32.38	1475.
1000	2.88	34.37	990	27.42	73.6	11.31	46.50	1478.
1200	2.64	34.44	1188	27.49	67.0	12.71	62.22	1480.



OFFSHORE OCEANOGRAPHY GROUP

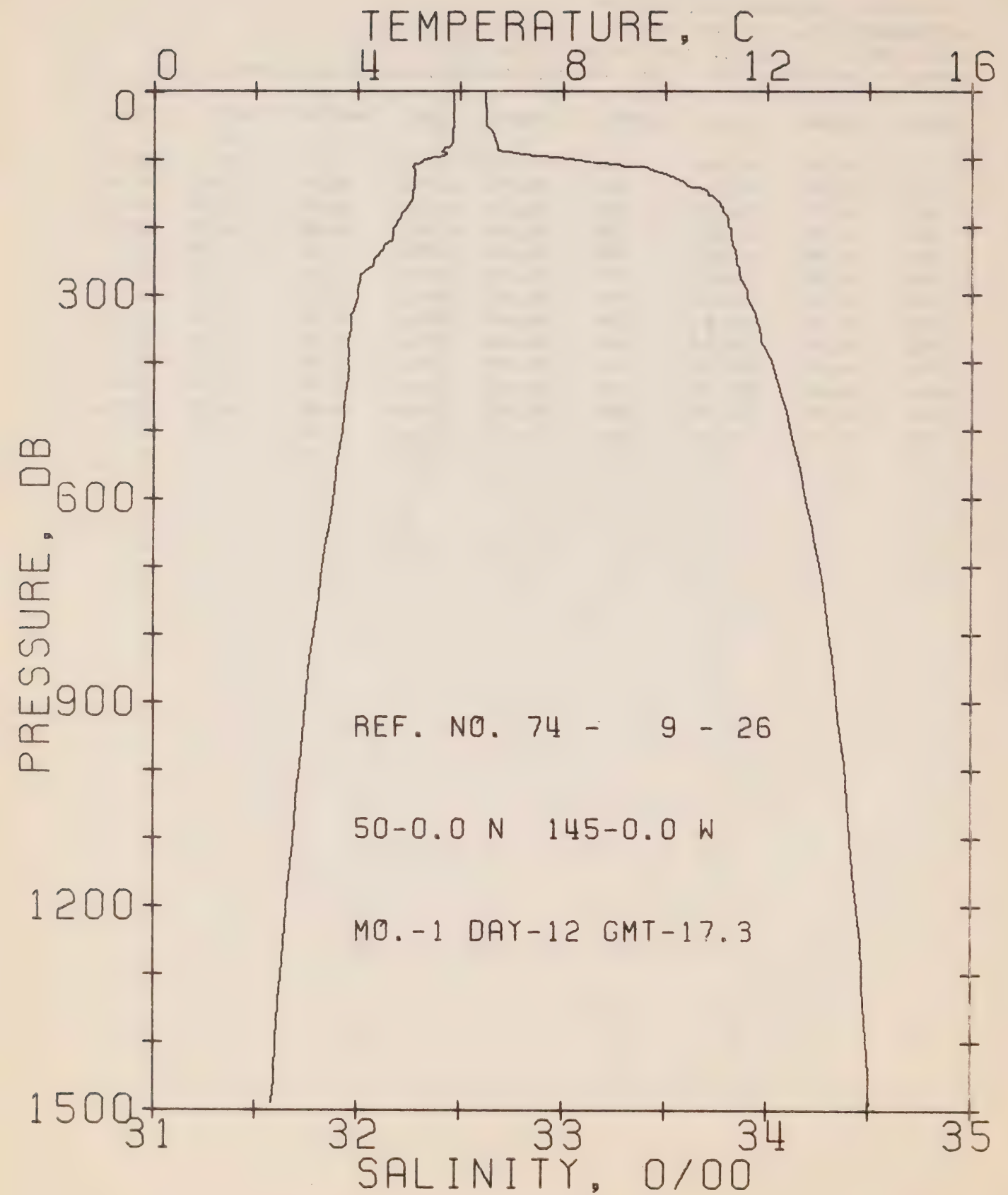
REFERENCE NO. 74- 9- 25

DATE 11/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 81 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.78	32.63	0	25.73	226.9	0.0	0.0	1471.
10	5.78	32.63	10	25.73	227.3	0.23	0.01	1471.
20	5.78	32.63	20	25.73	227.4	0.45	0.05	1471.
30	5.78	32.63	30	25.73	227.5	0.68	0.10	1472.
50	5.78	32.63	50	25.73	227.7	1.14	0.29	1472.
75	5.75	32.63	75	25.74	227.2	1.71	0.65	1472.
100	5.63	32.85	99	25.92	210.1	2.27	1.15	1472.
125	5.15	33.41	124	26.42	162.9	2.72	1.66	1472.
150	5.03	33.73	149	26.69	138.1	3.09	2.18	1472.
175	4.78	33.80	174	26.77	130.1	3.42	2.73	1471.
200	4.48	33.82	199	26.82	125.6	3.74	3.34	1471.
225	4.30	33.83	223	26.85	123.2	4.05	4.01	1470.
250	4.26	33.87	248	26.88	120.4	4.35	4.75	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 74- 9- 26

DATE 12/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 129 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.87	32.62	0	25.71	228.7	0.0	0.0	1471.
10	5.87	32.62	10	25.72	228.9	0.23	0.01	1472.
20	5.87	32.62	20	25.72	228.9	0.46	0.05	1472.
30	5.88	32.63	30	25.72	228.8	0.69	0.10	1472.
50	5.88	32.63	50	25.72	228.9	1.14	0.29	1472.
75	5.82	32.67	75	25.76	225.3	1.71	0.65	1472.
100	5.40	33.02	99	26.09	194.7	2.25	1.14	1472.
125	5.10	33.53	124	26.52	153.4	2.68	1.62	1472.
150	5.07	33.70	149	26.67	140.3	3.04	2.13	1472.
175	4.92	33.78	174	26.74	133.2	3.39	2.70	1472.
200	4.70	33.81	199	26.79	128.4	3.71	3.32	1471.
225	4.58	33.83	223	26.82	126.2	4.03	4.01	1471.
250	4.32	33.85	248	26.86	122.1	4.34	4.76	1471.
300	3.99	33.90	298	26.94	115.3	4.93	6.42	1470.
400	3.82	34.02	397	27.05	105.4	6.04	10.34	1471.
500	3.69	34.11	496	27.14	98.0	7.05	14.99	1473.
600	3.52	34.19	595	27.21	91.2	7.99	20.27	1474.
800	3.14	34.31	793	27.34	79.9	9.69	32.36	1475.
1000	2.86	34.38	990	27.43	72.4	11.22	46.31	1478.
1200	2.61	34.44	1188	27.50	66.8	12.61	61.92	1480.

SURFACE TEMPERATURE AND SALINITY OBSERVATIONS

(P-73-9)

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 73- 9

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
73	12	8	440	30.872	10.0	125-33
73	12	8	615	31.923	9.8	126- 0
73	12	8	905	32.373	8.2	126-40
73	12	8	1250	32.352	8.9	127-40
73	12	8	1700	32.363	8.7	128-40
73	12	8	1950	32.333	8.8	129-40
73	12	8	2235	32.323	7.9	130-40
73	12	9	145	32.533	8.3	131-40
73	12	9	500	32.555	8.8	132-40
73	12	9	755	32.536	8.1	133-40
73	12	9	1100	32.476	7.6	134-40
73	12	9	1400	32.430	8.0	135-40
73	12	9	1715	32.449	7.4	136-40
73	12	9	1955	32.490	7.2	137-40
73	12	9	2230	32.541	7.5	138-40
73	12	10	135	32.534	7.4	139-40
73	12	10	410	32.521	7.1	140-40
73	12	10	655	32.511	7.3	141-40
73	12	10	955	32.528	7.2	142-40
73	12	10	1350	32.572	6.7	143-40
73	12	11	0	32.579	6.6	ON STATION
73	12	12	0	32.556	6.8	ON STATION
73	12	13	0	32.574	6.5	ON STATION
73	12	14	0	32.568	6.4	ON STATION
73	12	15	0	32.600	6.4	ON STATION
73	12	16	0	32.599	6.8	ON STATION
73	12	17	0	32.558	6.5	ON STATION
73	12	18	0	32.565	6.5	ON STATION
73	12	19	0	32.561	6.5	ON STATION
73	12	20	0	32.428	6.8	136-25
73	12	21	0	32.479	6.7	136-59
73	12	22	0	32.477	6.6	136-12
73	12	23	0	32.511	6.8	142-28
73	12	24	0	32.576	6.6	ON STATION
73	12	25	0	32.576	6.6	ON STATION
73	12	26	0	32.572	6.6	ON STATION
73	12	27	0	32.608	6.4	ON STATION
73	12	28	0	32.580	6.5	ON STATION
73	12	29	0	32.599	6.3	ON STATION
73	12	30	0	32.598	6.4	ON STATION
73	12	31	0	32.596	6.2	ON STATION
74	1	1	0	32.619	6.3	ON STATION
74	1	2	0	32.605	6.2	ON STATION
74	1	3	0	32.590	6.2	ON STATION
74	1	4	0	32.665	6.1	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 73- 9

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
74	1	4	0	32.665	6.1	ON STATION
74	1	5	0	32.617	6.1	ON STATION
74	1	6	0	32.613	6.1	ON STATION
74	1	7	0	32.614	6.1	ON STATION
74	1	8	0	32.604	6.1	ON STATION
74	1	9	0	32.617	6.1	ON STATION
74	1	10	0	32.619	6.1	ON STATION
74	1	11	0	32.625	6.0	ON STATION
74	1	12	0	32.631	6.1	ON STATION
74	1	13	0	32.625	6.0	ON STATION
74	1	14	135	32.632	5.8	143-40
74	1	14	615	32.605	6.5	142-40
74	1	14	1111		6.9	141-40
74	1	14	1445	32.577	6.7	140-40
74	1	14	1740	32.604	7.1	139-40
74	1	14	1945	32.618	6.7	138-40
74	1	14	2245	32.529	6.6	137-40
74	1	15	121	32.541	7.0	136-40
74	1	15	400	32.484	6.9	135-40
74	1	15	640	32.505	7.1	134-40
74	1	15	950	32.583	7.3	133-40
74	1	15	1340	32.586	7.6	132-40
74	1	15	1530	32.587	7.1	131-40
74	1	15	1850	32.529	7.2	130-40
74	1	15	2050	32.379	7.4	129-40
74	1	16	37	32.393	7.3	128-40
74	1	16	425	32.395	7.7	127-40
74	1	16	800	32.346	8.6	126-40
74	1	16	1000	32.128	8.7	126- 0
74	1	16	1225	31.260	7.8	125-33

CAI EP 321

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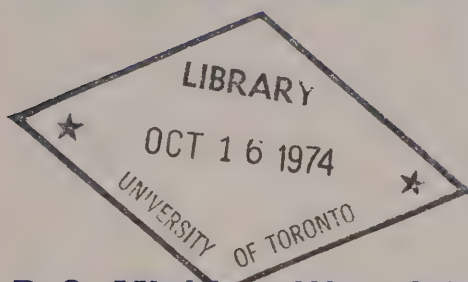
Pacific Marine Science Report 74-6

Government
Publication

OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P (50°N , 145°W)

Volume 59

January 11 - April 17, 1974



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Canada
MARINE SCIENCES DIRECTORATE, PACIFIC REGION

PACIFIC MARINE SCIENCE REPORT 74-6

OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P (50°N, 145°W)

VOLUME 59

JANUARY 11 - APRIL 17, 1974

by

B.G. Minkley, W.K. Johnson, B. Cox, C. de Jong

Victoria, B.C.
Marine Sciences Directorate, Pacific Region
Environment Canada
May, 1974

This is a manuscript which has received only limited circulation. On citing this report in a bibliography, the title should be followed by the words "UNPUBLISHED MANUSCRIPT" which is in accordance with accepted bibliographic custom.

INTRODUCTION

Canadian operation of Ocean Weather Station P (latitude 50°00'N, longitude 145°00'W) was inaugurated in December, 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS Vancouver and the CCGS Quadra. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July, 1952. A program of more extensive oceanographic observations was commenced in August, 1956. This was further extended in April, 1959, by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections in addition to being made on Line P oceanographic stations are also made at odd meridians at 40' i.e., 139°40'W, 141°40'W, etc. These stations are known as Line P BT stations. Data observed prior to 1968 has been indexed by Collins et al, (1969).

The present record includes hydrographic and continuously sampled STD data collected from the CCGS Quadra during the period 11 January to 20 February, 1974; from the CCGS Vancouver during the period 15 February to 4 April, 1974; and surface temperature and salinity data collected from the CCGS Quadra during the period 29 March to 17 April, 1974.

All physical oceanographic data have been stored by the Canadian Oceanographic Data Centre (CODC), 615 Booth Street, Ottawa, Ontario, Canada. Requests for these data should be directed to CODC.

Biological and productivity data are published in the Manuscript Report series of the Fisheries Research Board of Canada (FRB), the Biological Station, Nanaimo, B.C., Canada. Requests for these data should be directed to FRB.

Marine geochemical data are for the Ocean Chemistry Group, Marine Sciences Directorate, Department of the Environment, 512-1230 Government St., Victoria, B.C., Canada.

Program of Observations from CCGS Quadra, 11 January to 20 February, 1974.
(P-74-1) (CODC Ref. No. 15-74-001)

Oceanographic observations were made by Mr. B.G. Minkley, Marine Sciences Directorate, Department of the Environment.

En route to Station P, Stations 1 to 3, 6 to 8, and 10 were occupied and a STD profile made to near bottom or 1500 metres. Stations 4, 5, 9, 11 and 12 were missed due to adverse weather conditions. Mechanical BT or XBT's were taken at Stations 1 to 10 and BT stations. Salinity, nitrate, alkalinity and nutrient samples were taken from the seawater loop. Beyond Station 10 the ship was not on Line P due to high winds and rough seas. One surface tar ball tow was taken after Station 6. The surface temperature recorder and the thermosalinograph were run continuously.

At Station P the oceanographic program was carried out as follows:

I) Physical Oceanography

- 1) Profiles of salinity, temperature and oxygen were obtained from four hydrographic stations, two to near bottom (4200 metres) and two to 1500 metres.
- 2) STD profiles to 1500 metres following the hydrographic stations.
- 3) STD profiles to 300 metres between the hydrographic stations.
- 4) Mechanical BT's were taken every three hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 5) Salinity samples daily at 0000 hrs. GMT from the seawater loop.
- 6) The wave recorder was run every three hours for 20 minutes to coincide with meteorological observations.

II) Marine Geochemistry

Samples were obtained as follows:

- 1) Oxygen samples were taken from all hydrographic stations.
- 2) Samples for tritium, nutrients, salinity, alkalinity, and total CO₂ were obtained from standard depths to 500 metres.
- 3) Nutrient samples daily at 0000 hrs. GMT, and hourly sampling for one 24 hour period from the seawater loop.
- 4) Alkalinity samples once every 3 days from the seawater loop.
- 5) Air CO₂ samples weekly in quadruplicate.
- 6) Two seawater C₁₄ samples were extracted from 50 gallons of water from the seawater loop.

III) Biological and Productivity

Samples were obtained as follows:

- 1) Two 150 metre vertical plankton hauls.
- 2) Samples for plant pigment, nitrate and C_{14} productivity were obtained from 9 depths to 200 metres.
- 3) Approximately 10 salmon were caught.

IV) Observations for Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. I. McAskie, Fisheries Research Board of Canada, the Biological Station, Nanaimo, B.C., Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Calgary, Calgary, Alberta, Canada.
- 3) A wave rider buoy was launched and moored to an anchored 16 foot diameter disc buoy. Recordings were made simultaneously with the shipboard wave recorder. These observations were for Mr. J.R. Wilson, Marine Sciences Directorate, Department of the Environment, 615 Booth St., Ottawa, Ontario, Canada. (The anchored buoy was laid on November 11, 1972 by the University of California.)

En route from Station P only Station 8 was missed due to high winds. All other stations were occupied and a STD profile made to near bottom or 1500 metres. Mechanical BT's were taken at all Line P and BT stations. A salinity, nitrate, nutrient and alkalinity sample was taken from the seawater loop at all Line P stations. The surface temperature recorder and the thermosalinograph were run continuously.

Program of Observations from CCGS Vancouver, 15 February - 3 April, 1974
(P-74-2) (CODC Ref. No. 15-74-002)

Oceanographic observations were made by Messrs. W.K. Johnson, and B. Cox, Marine Sciences Directorate, Department of the Environment.

En route to Station P, only Stations 7, 10, 11 and 12 were occupied and a STD profile made to 1500 metres. All other stations were missed due to adverse weather conditions. XBT's were taken at all Line P and BT stations. Salinity, nitrate, alkalinity, nutrient and total CO_2 samples were taken from the seawater loop at all Line P stations. A surface tar ball tow was made at Stations 7, 9, 10 and 11. The surface temperature recorder was run continuously.

At Station P the oceanographic program was carried out as follows:

I) Physical Oceanography

- 1) Profiles of salinity, temperature and oxygen were obtained from five hydrographic stations to near bottom (4200 metres).
- 2) STD profiles to 1500 metres following the hydrographic stations.
- 3) STD profiles to 300 metres between the hydrographic stations.
- 4) Mechanical BT's were taken every 3 hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 5) Salinity samples daily at 0000 hrs. GMT from the seawater loop.

II) Marine Geochemistry

Samples were obtained as follows:

- 1) Oxygen samples were taken from all hydrographic stations.
- 2) Samples for tritium, nutrients, salinity, alkalinity and total CO₂ were obtained from one hydrographic station.
- 3) Nutrient samples daily at 0000 hrs. GMT and hourly sampling for one 24 hour period from the seawater loop.
- 4) Two seawater C₁₄ samples were extracted from 50 gallons of water from the seawater loop.
- 5) Alkalinity samples once every 3 days from the seawater loop.
- 6) Air CO₂ samples weekly in quadruplicate.
- 7) Six surface tar ball tows were made at a speed of 4 1/2 knots. The duration of the tows ranged from 15-60 minutes.
- 8) The pCO₂ system was run continuously.

III) Biological and Productivity

Samples were obtained as follows:

- 1) Plankton
 - 6-150 metre vertical plankton hauls.
 - 2-1200 metre vertical plankton hauls.
 - 9-10 minute surface plankton tows at sundown.
 - 32-micro and nano organism samples filtered from seawater loop.
- 2) Profiles of plant pigment, nitrate and C₁₄ productivity were obtained from three hydrographic stations to 200 metres.
- 3) Weekly secchi disk readings between 1100 and 1200 hrs. local time.
- 4) Approximately 100 salmon were caught.

IV) Observations for Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. I. McAskie, Fisheries Research Board of Canada, the Biological Station, Nanaimo, B.C., Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Calgary, Calgary, Alberta, Canada.

Emergency Run

The ship left Station P on March 12 to take an ill crew member to Quatsino Sound. En route to and from Quatsino Sound the surface temperature recorder and pCO₂ system were run continuously. Surface salinity samples were taken every three hours from the seawater loop. The ship returned on station by March 16.

En route from Station P all Line P stations were occupied and a STD profile made to near bottom or 1500 metres. Mechanical BT or XBT's were taken at all Line P and BT stations. Salinity, nitrate, nutrient, alkalinity, total CO₂ and oxygen were taken from the seawater loop at all Line P stations. A surface tar ball tow was made at Stations 12, 9, 8, 6, 4 and 2. The pCO₂ system was run continuously.

Program of Observations from CCGS Quadra, 29 March - 17 April, 1974.
(P-74-3) (CODC Ref. No. 15-74-003)

Oceanographic observations were made by the ship's officers.

En route to Station P, mechanical BT's were taken at all Line P and BT stations. A salinity sample was taken from the seawater loop at that time. The surface temperature recorder was run continuously.

At Station P the oceanographic program was carried out as follows:

I) Physical Oceanography

- 1) Mechanical BT's were taken every 3 hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 2) The wave recorder was run every 3 hours for 20 minutes to coincide with meteorological observations.
- 3) Salinity samples daily at 0000 hrs. GMT from the seawater loop.

II) Marine Geochemistry

Samples were obtained as follows:

- 1) Nutrient samples daily at 0000 hrs. GMT from the seawater loop.
- 2) Alkalinity samples once every three days from the seawater loop.
- 3) Air CO₂ samples weekly in quadruplicate.

III) Observations for Other Agencies

- 1) Marine mammal observations were made for Mr. I. McAskie, Fisheries Research Board of Canada, the Biological Station, Nanaimo, B.C., Canada.
- 2) Bird observations were made for Dr. M. Myres, University of Calgary, Calgary, Alberta, Canada.

En route from Station P, mechanical BT's were taken at Stations 5 1/2 to 1. The surface temperature recorder was run continuously.

Data was processed by Messrs. C. de Jong, B. Minkley, E. Luscombe, and E. Marles, and assembled and edited for publication by Mr. C. de Jong.

Observational Procedures

Temperatures at depth were measured by deep-sea reversing thermometers of German (Richter and Wiese) or Japanese (Yoshino Keiki Co.) manufacture. Two protected thermometers were used on all Nansen bottles, and one unprotected thermometer was used on each bottle at depths of 300 m or greater. The accuracy of protected reversing thermometers is believed to be $\pm 0.02^{\circ}\text{C}$.

Surface water temperatures were measured from a bucket sample using a deck thermometer of $\pm 0.1^{\circ}\text{C}$ accuracy.

Salinity determinations were made aboard ship with either an Auto-Lab Model 601 Mark 111 inductive salinometer or a Hytech Model 6220 lab salinometer. Accuracy using duplicate determinations is estimated to be ± 0.003 ppt.

Depth determinations were made using the "depth difference" method described in the U.S.N. Hydrographic Office Publication No. 607 (1955). Depth estimates have an approximate accuracy of ± 5 m for depths less than 1000 m, and $\pm 0.5\%$ of depth for depths greater than 1000 m.

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Carpenter, 1965).

Line P engine intake continuous temperatures on both ships were recorded by a Honeywell Model 15303836 Recorder. The temperature probe is at a depth of approximately 3 metres below the sea surface and the instrument accuracy is believed to be $\pm 0.1^{\circ}\text{C}$.

CCGS Quadra is equipped with a Bissett Berman Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of surface temperatures and salinities from the ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder is situated in the dry lab. The accuracy of this instrument is believed to be $\pm 0.1^{\circ}\text{C}$ for temperature and ± 0.1 ppt for salinity.

CCGS Vancouver and CCGS Quadra were equipped with a Bissett-Berman Model 9006 STD.

Computations

All hydrographic data were processed with the aid of an IBM 360 computer. Reversing thermometer temperature corrections, thermometric depth calculations, and accepted depth from the "depth difference" method were computed. Extraneous thermometric depths caused by thermometer malfunctions are automatically edited and replaced. A Calcomp 565 Offline Plotter was used to plot temperature-salinity and temperature-oxygen diagrams, as well as plots of temperature, salinity, and dissolved oxygen vs \log_{10} depth. These plots were used to check the data for errors.

Missing hydrographic data were obtained using a weighted parabolas interpolation method (Reiniger and Ross, 1968). These data are indicated with an asterisk in this data record.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from punch card and magnetic tape records.

Analog records from the salinity-temperature-pressure instrument have been machine digitized, then replotted using the Calcomp Plotter.

Digitization was continued until original and computer plotted traces were coincident. Temperature and salinity values were listed at standard pressures; integrals (depths, geopotential anomaly, and potential energy anomaly) were computed from the entire array of digitized data.

The headings for the data listings are explained as follows:

PRESS	is pressure (decibars)
TEMP	is temperature (degrees Celsius)
SAL	is salinity (parts per thousand)
DEPTH	is reported in metres

SIGMA-T	is specific gravity anomaly
SVA	is specific volume anomaly
THETA	is potential temperature (degrees Celsius)
SVA (THETA)	is potential specific volume anomaly
DELTA D	is geopotential anomaly (J/kg)
POT EN	is potential energy in units of 10^8 ergs/cm ²
OXY	is the concentration of dissolved oxygen expressed in millilitres per litre
B-V PERIOD	is the Brunt-Vaisala period in minutes

REFERENCES

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- Reiniger, R.F., and C.K. Ross. 1968. A method of interpolation with application to oceanographic data. *Deep Sea Res.*, 15: 185-193.
- U.S.N. Hydrographic Office. 1955. Instruction manual for oceanographic observations, Publ. no. 607.

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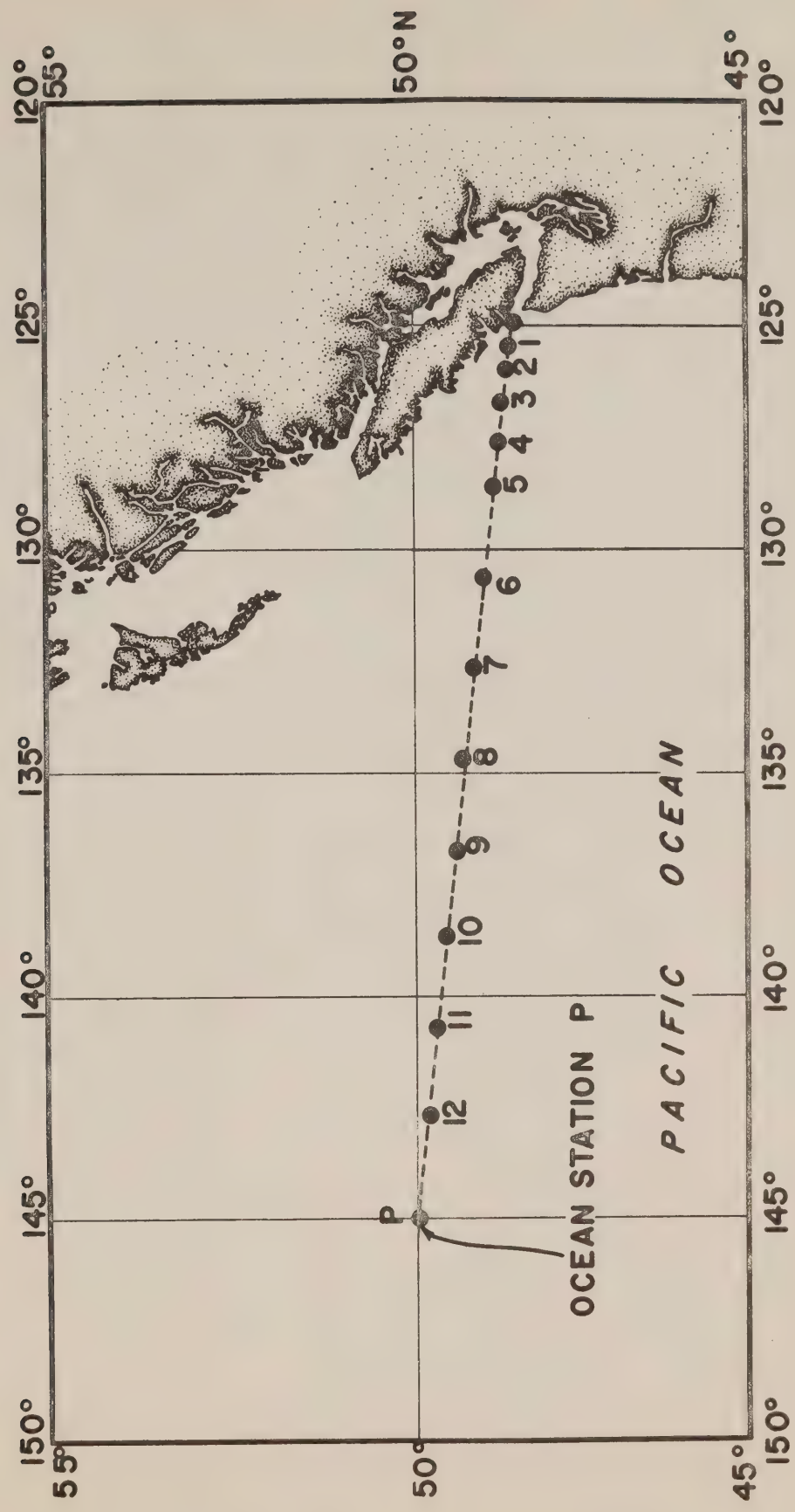


Fig. 1 Chart showing Line P station positions.

OCEANOGRAPHIC DATA OBTAINED ON CRUISE P-74-1
(CODC REFERENCE NO. 15-74-001)

RESULTS OF HYDROGRAPHIC OBSERVATIONS

(P-74-1)

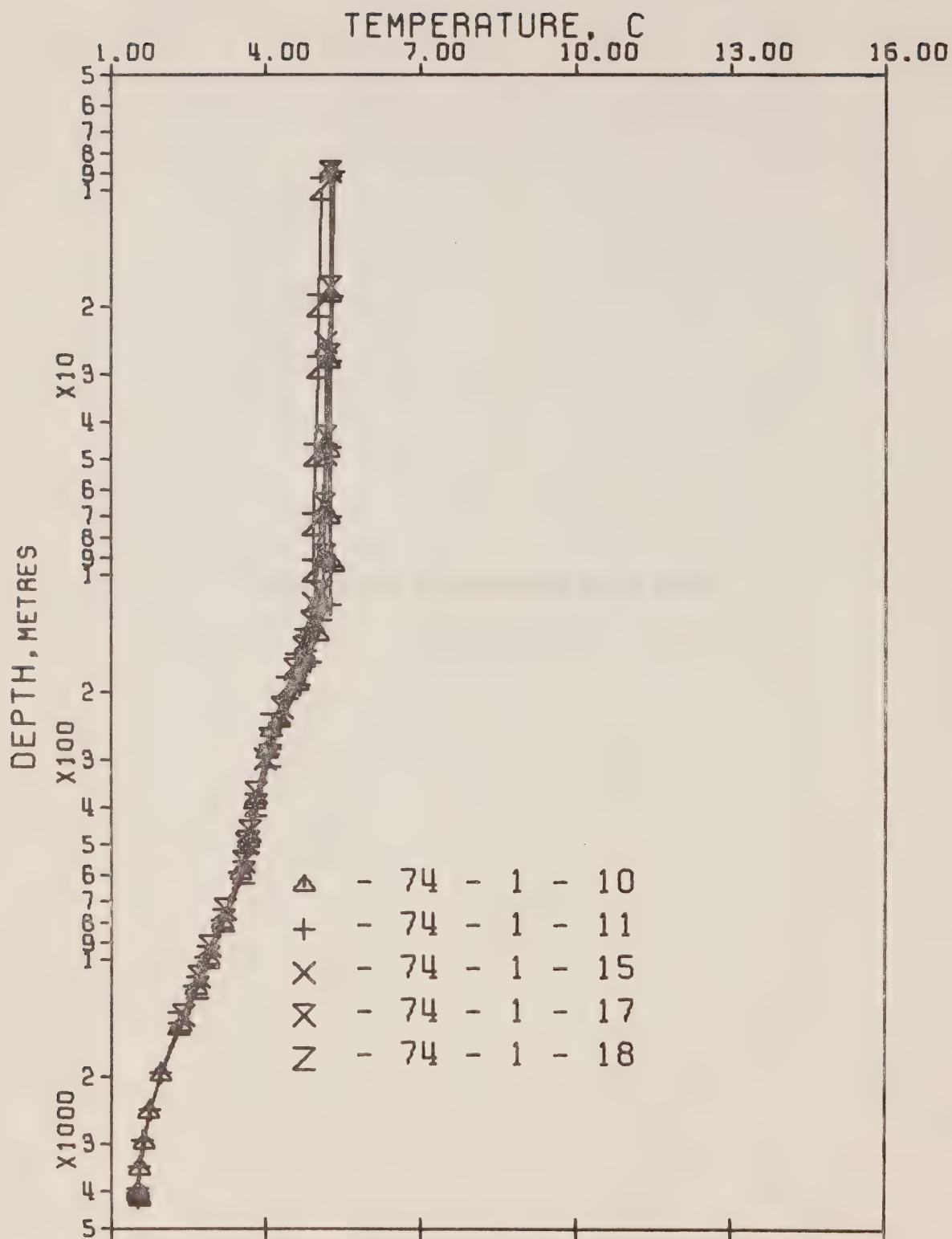


Figure 2 Composite plot of temperature vs \log_{10} depth. P-74-1

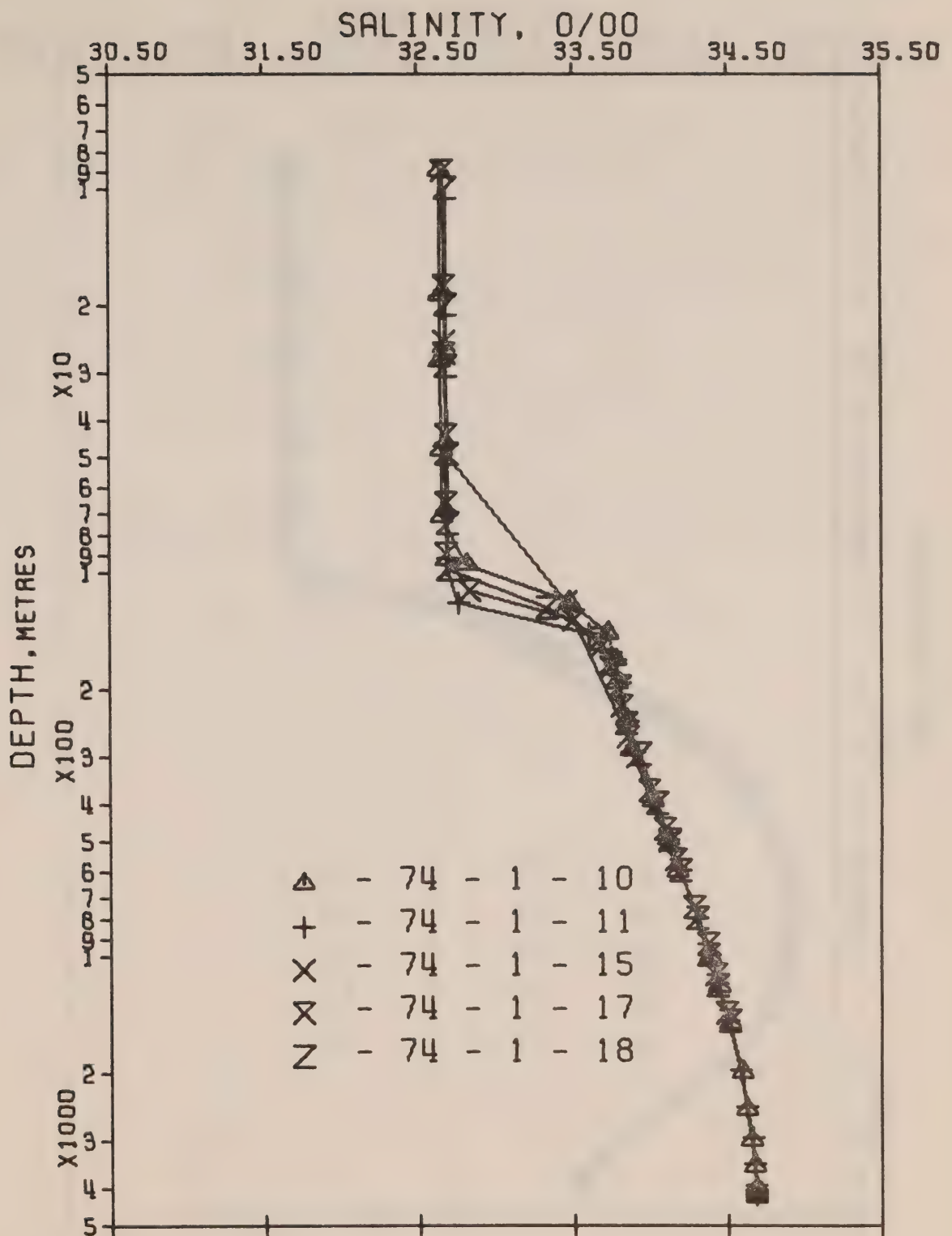


Figure 3 Composite plot of salinity vs \log_{10} depth. P-74-1

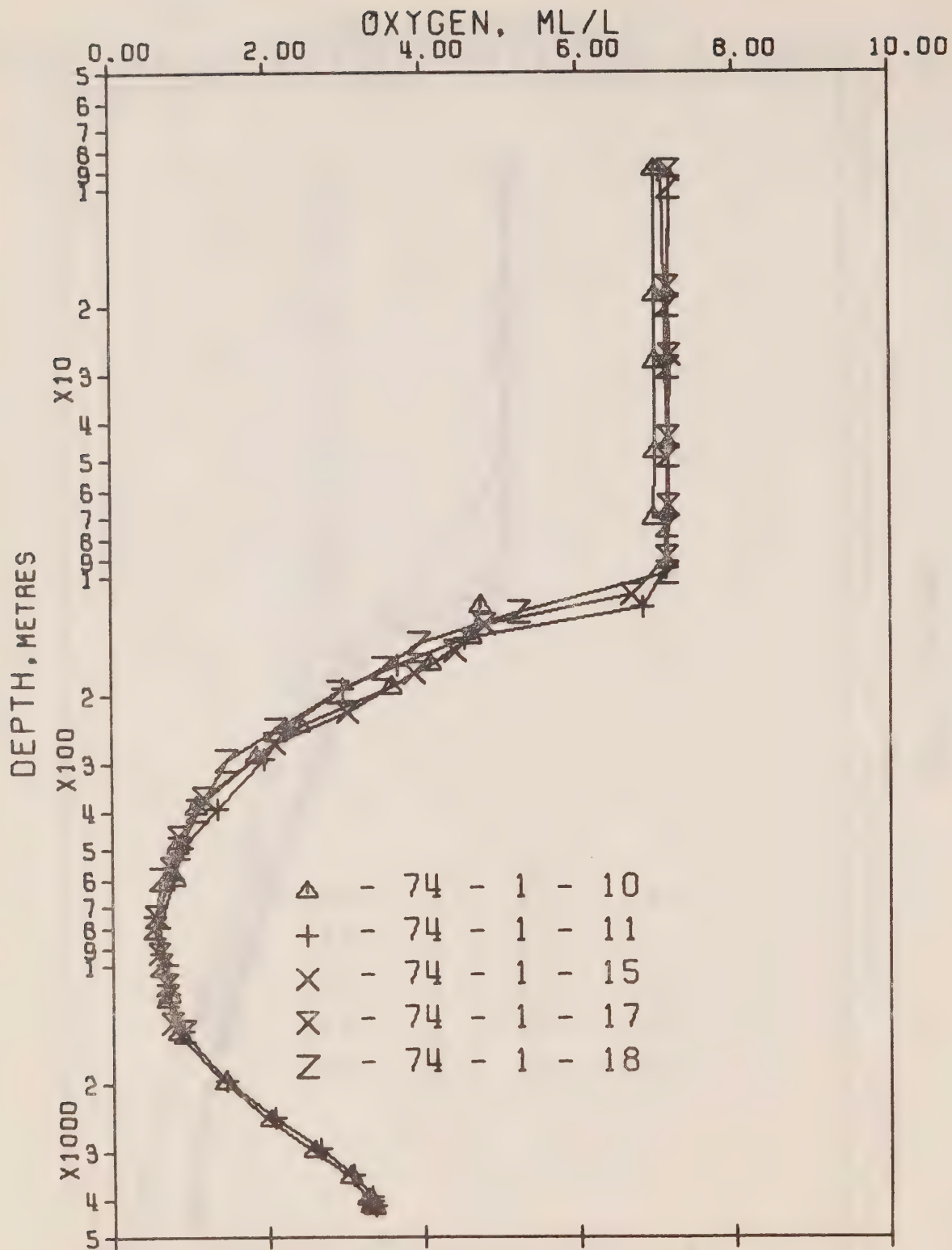
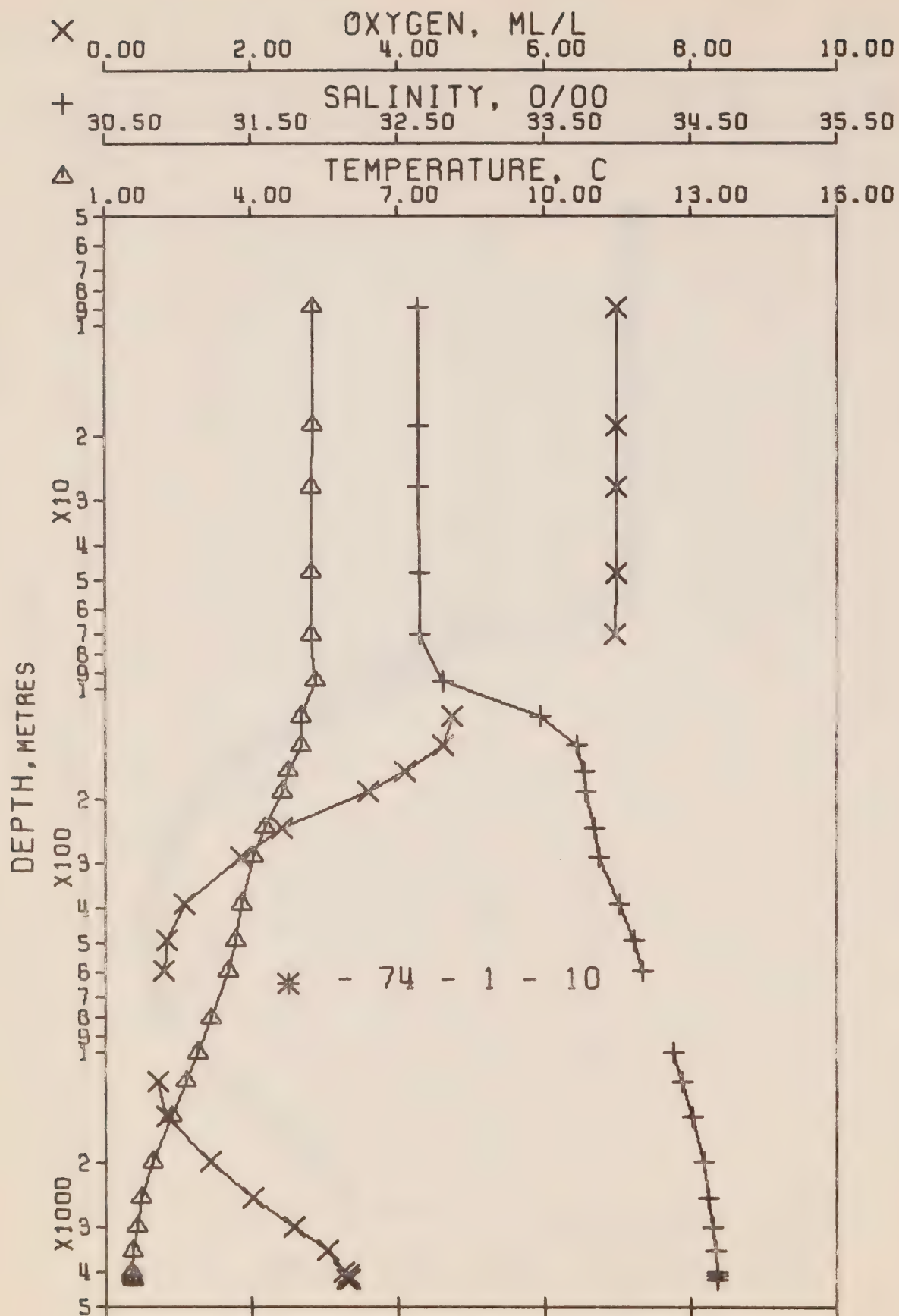


Figure 4 Composite plot of oxygen vs \log_{10} depth. P-74-1



DATE 20/ 1/74

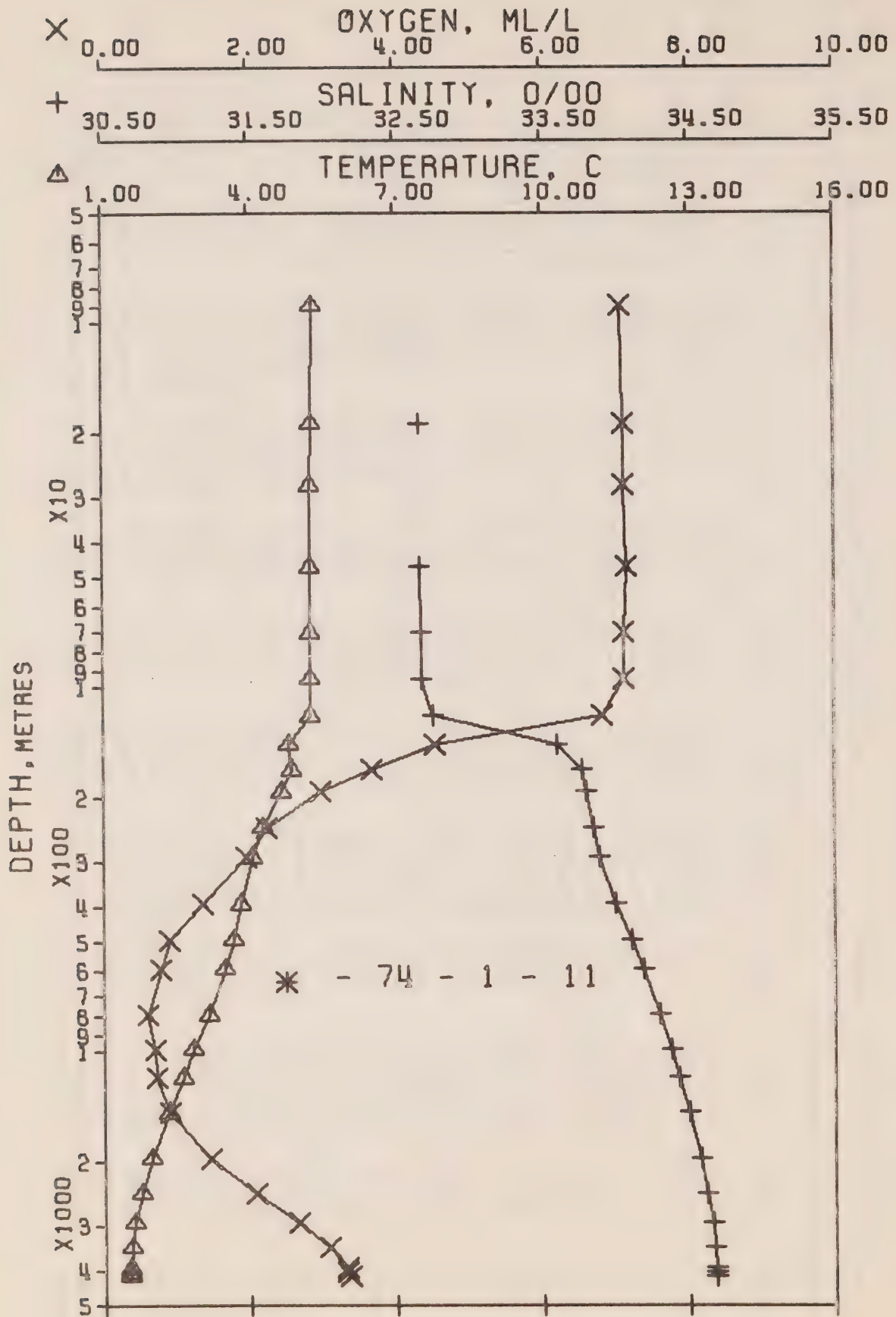
REFERENCE NO. 74- 1- 10

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N, 145- 0.0 W GMT 18.0

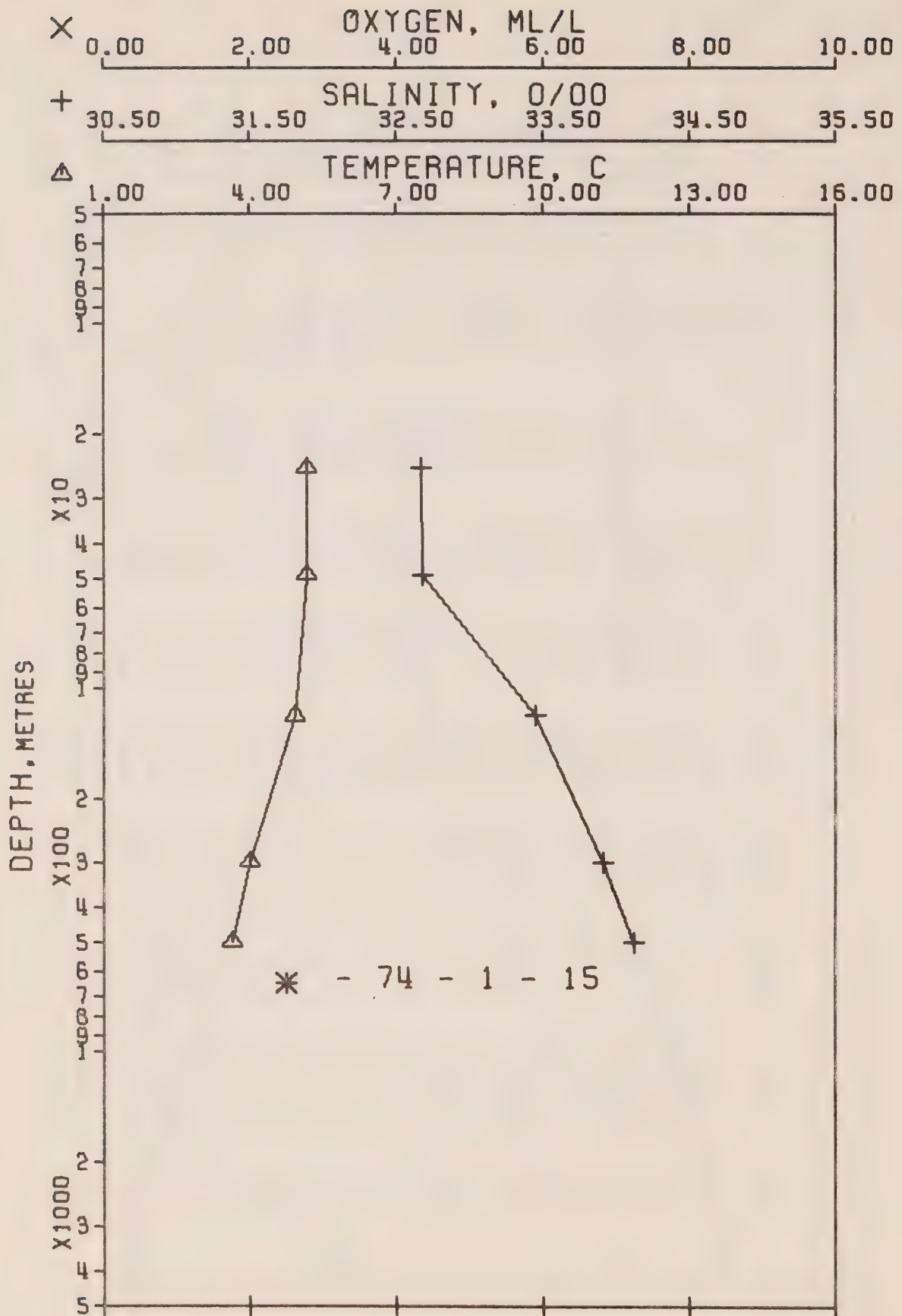
HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.27	32.642	0	25.303	220.5	5.27	220.3	0.3	0.0	7.09	1459.
9	5.26	32.642	9	25.304	220.5	5.26	220.2	0.20	0.01	6.93	1469.
19	5.25	32.643	19	25.306	220.5	5.25	220.1	0.42	0.04	6.93	1469.
28	5.24	32.643	28	25.307	220.5	5.24	220.0	0.62	0.09	6.93	1469.
48	5.23	32.648	48	25.312	220.1	5.23	219.4	1.06	0.26	6.97	1470.
71	5.24	32.648	71	25.311	220.5	5.23	219.5	1.53	0.57	6.97	1470.
96	5.31	32.815	95	25.935	209.0	5.30	207.7	2.10	1.03	0.0	1471.
120	5.03	33.473	119	26.487	156.8	5.02	155.3	2.55	1.51	4.75	1471.
144	5.03	33.725	143	26.637	138.2	5.02	136.3	2.90	1.98	4.62	1472.
169	4.76	33.768	168	26.751	132.2	4.75	130.2	3.23	2.52	4.10	1471.
193	4.62	33.781	192	26.777	130.0	4.61	127.7	3.55	3.11	3.60	1471.
243	4.27	33.844	241	26.864	121.9	4.25	119.4	4.17	4.49	2.41	1470.
292	4.03	33.869	290	26.909	118.0	4.01	115.1	4.77	6.10	1.86	1470.
393	3.90	34.008	390	27.043	106.0	3.77	102.4	5.90	10.05	1.08	1471.
497	3.66	34.112	493	27.139	97.6	3.63	93.2	6.95	14.83	0.83	1472.
603	3.51	34.170	598	27.200	92.5	3.47	87.4	7.96	20.48	0.81	1474.
814	3.17	34.286*	807	27.325	81.7	3.11	75.4	9.80	33.76	0.0	1476.
1012	2.88	34.378	1002	27.424	73.1	2.81	65.9	11.32	47.92	0.0	1478.
1211	2.64	34.437	1199	27.493	67.2	2.56	59.4	12.71	63.73	0.73	1480.
1513	2.34	34.507	1495	27.574	60.2	2.24	51.5	14.63	90.26	0.83	1484.
2020	1.95	34.586	1995	27.669	52.1	1.81	42.4	17.44	140.98	1.44	1491.
2531	1.73	34.625	2497	27.717	48.2	1.55	37.5	19.99	200.04	2.03	1499.
3045	1.62	34.654	3001	27.748	46.4	1.39	34.3	22.41	269.01	2.58	1507.
3559	1.53	34.671	3503	27.768	45.3	1.25	32.1	24.76	347.95	3.04	1515.
4070	1.52	34.680	4001	27.776	45.9	1.19	30.9	27.08	438.30	3.26	1524.
4171	1.52	34.682	4100	27.778	46.0	1.18	30.7	27.55	457.89	3.33	1526.
4263	1.53	34.682	4189	27.777	46.4	1.18	30.7	27.97	476.04	3.30	1527.
4273	1.53	34.682	4199	27.777	46.4	1.18	30.7	28.02	478.12	3.34	1528.



OFFSHORE OCEANOGRAPHY GROUP
 POSITION 50-0.0 N, 145-0.0 W GMT 18.1
 HYDROGRAPHIC CAST DATA
 REFERENCE NO. 74-1-11 DATE 23/ 1/74

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. FN	OXY	SOON
9	5.33	32.671	0	25.819	219.0	5.33	218.8	0.0	0.0	7.11	1454.
9	5.32	32.673*	3	25.822	219.9	5.32	218.6	0.20	0.01	7.09	1459.
19	5.28	32.675	19	25.828	218.4	5.28	218.0	0.42	0.04	7.12	1463.
28	5.26	32.675*	28	25.830	218.3	5.26	217.8	0.62	0.09	7.12	1469.
47	5.26	32.673	47	25.829	218.6	5.26	217.9	1.03	0.25	7.15	1473.
71	5.27	32.677	71	25.831	218.6	5.26	217.7	1.56	0.57	7.12	1470.
96	5.27	32.684	95	25.836	218.3	5.26	217.2	2.09	1.02	7.13	1471.
121	5.26	32.764	120	25.900	212.5	5.25	211.0	2.64	1.63	6.82	1471.
145	4.82	33.601	144	26.612	145.2	4.81	143.4	3.08	2.21	4.53	1471.
170	4.86	33.767	169	26.739	133.5	4.85	131.3	3.42	2.76	3.68	1472.
195	4.05	33.804	194	26.792	128.6	4.64	126.3	3.75	3.38	2.98	1471.
245	4.26	33.853	243	26.872	121.2	4.24	118.7	4.36	4.76	2.25	1470.
296	4.05	33.888	294	26.922	116.9	4.03	113.9	4.97	6.44	1.95	1470.
397	3.83	34.000	394	27.033	107.0	3.80	103.3	6.10	10.44	1.37	1471.
499	3.66	34.108	495	27.136	97.9	3.62	93.5	7.15	15.20	0.90	1472.
598	3.48	34.187	593	27.216	90.9	3.44	85.8	8.08	20.41	0.78	1473.
802	3.15	34.298	795	27.336	80.6	3.09	74.4	9.82	32.86	0.60	1475.
998	2.84	34.379	988	27.429	72.4	2.77	65.5	11.31	46.51	0.71	1477.
1193	2.61	34.432	1181	27.491	67.2	2.53	59.5	12.67	61.71	0.72	1480.
1490	2.32	34.503	1474	27.572	60.2	2.22	51.7	14.56	87.51	0.89	1484.
1939	1.95	34.582	1965	27.665	52.2	1.81	42.7	17.33	136.73	1.47	1490.
2492	1.74	34.624	2459	27.715	48.4	1.56	37.7	19.85	194.19	2.08	1498.
2998	1.60	34.658	2955	27.753	45.7	1.39	33.9	22.22	260.48	2.67	1506.
3508	1.53	34.672	3453	27.769	45.0	1.26	32.0	24.52	336.79	3.08	1514.
4019	1.52	34.682	3952	27.778	45.6	1.19	30.8	26.82	425.30	3.32	1523.
4121	1.52	34.681	4051	27.777	45.9	1.18	30.8	27.29	444.60	3.31	1525.
4213	1.52	34.684	4141	27.779	46.0	1.17	30.6	27.71	462.65	3.35	1526.
4224	1.52	34.684	4151	27.779	46.0	1.17	30.6	27.75	464.68	3.37	1527.

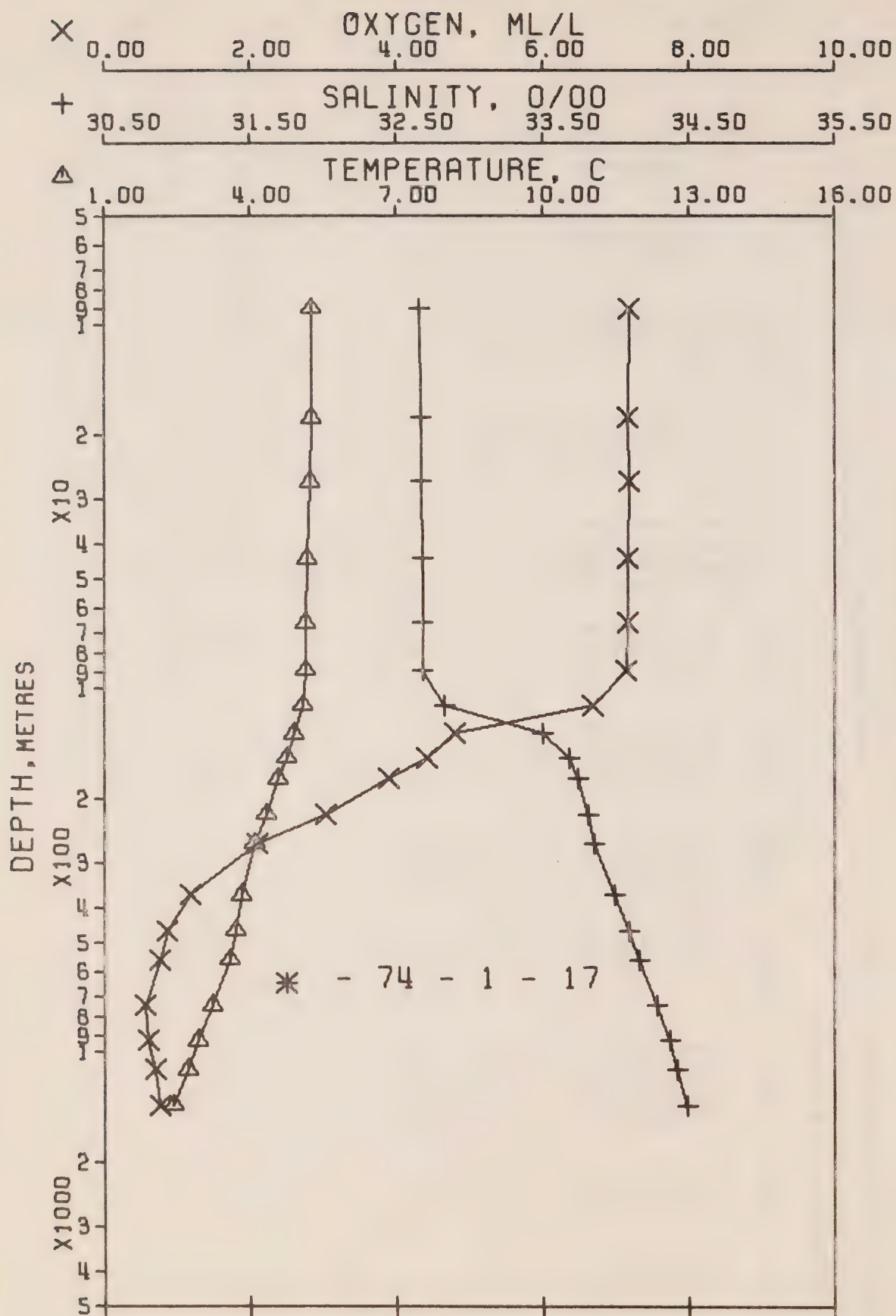


OFFSHORE OCEANOGRAPHY GROUP
 POSITION 50-0.0 N, 145-0.0 W GMT 19.5
 HYDROGRAPHIC CAST DATA

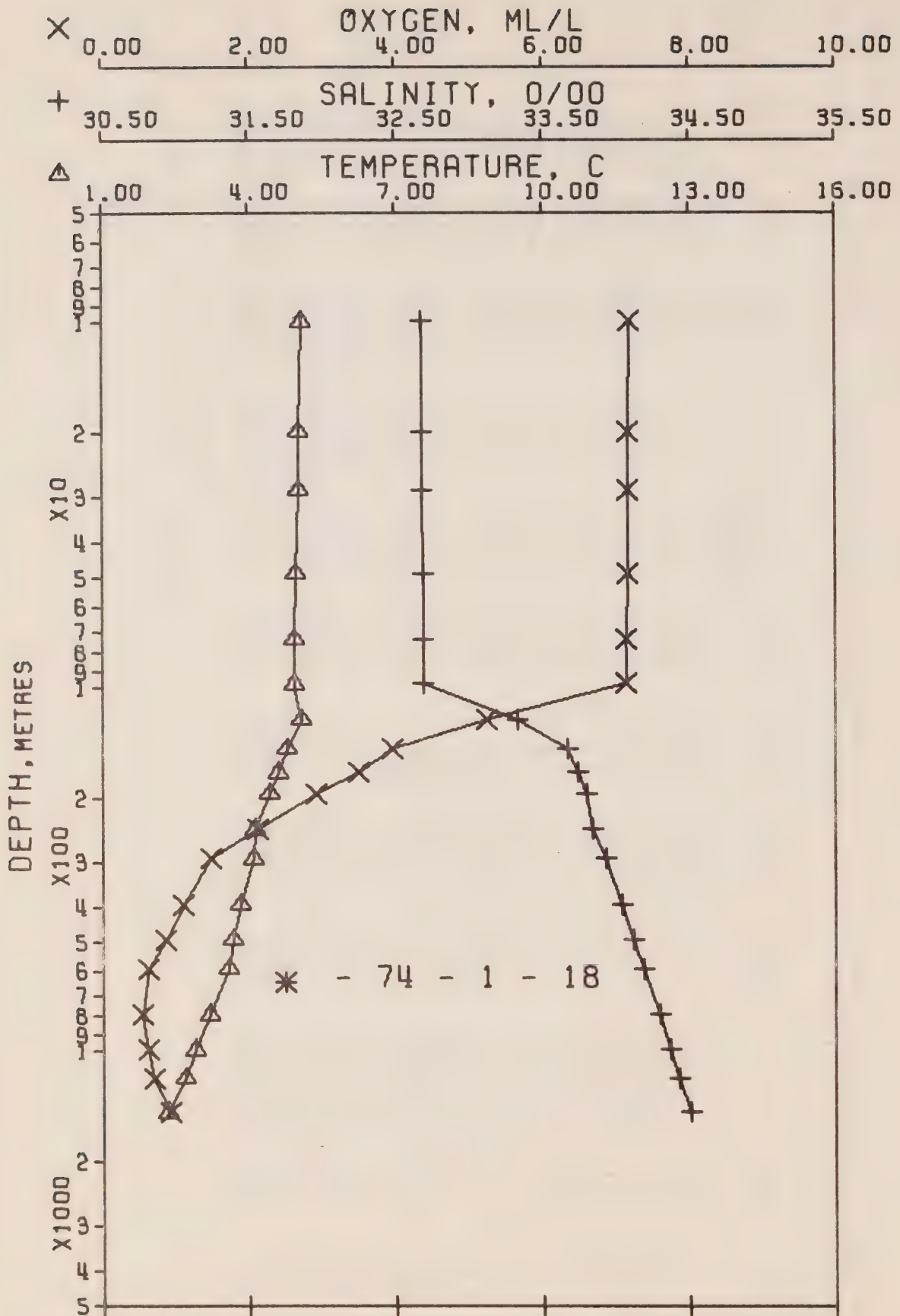
REFERENCE NO. 74-1-15

DATE 4/ 2/74

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.23	32.676	0	25.334	217.6	5.23	217.3	0.0	0.0	0.0	1460.
25	5.17	32.675	25	25.840	217.2	5.17	216.8	0.55	0.07	0.0	1463.
49	5.16	32.680	49	25.845	217.0	5.16	216.3	1.07	0.27	0.0	1463.
120	4.93	33.451	119	26.481	157.3	4.92	155.8	2.42	1.39	0.0	1471.
302	4.00	33.912	300	26.946	114.5	3.98	111.6	4.69	6.48	0.0	1470.
504	3.65	34.117	500	27.144	97.2	3.61	92.7	6.79	15.13	0.0	1472.



OFFSHORE OCEANOGRAPHY GROUP											
POSITION 50-0.0 N. 145-0.0 W GMT 11.6											
HYDROGRAPHIC CAST DATA											
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
	5.27	32.665	0	25.321	218.8	5.27	218.6	0.0	0.0	7.20	1469.
9	5.26	32.665	9	25.322	218.8	5.26	218.5	0.20	0.01	7.13	1469.
18	5.25	32.668	13	25.826	218.5	5.25	218.2	0.40	0.04	7.17	1469.
27	5.22	32.670	27	25.831	218.2	5.22	217.7	0.59	0.58	7.17	1469.
44	5.16	32.677	44	25.843	217.2	5.16	216.5	0.97	0.22	7.17	1469.
60	5.15	32.673	66	25.345	217.2	5.14	216.3	1.45	0.49	7.17	1470.
90	5.13	32.684	89	25.352	216.8	5.12	215.6	1.95	0.89	7.15	1470.
112	5.08	32.834	111	25.976	205.2	5.07	203.8	2.43	1.38	6.68	1470.
134	4.96	33.496	133	26.520	153.8	4.89	152.1	2.82	1.37	4.81	1471.
156	4.75	33.680	155	26.682	138.6	4.74	136.8	3.14	2.34	4.43	1471.
178	4.58	33.745	177	26.753	132.1	4.57	130.1	3.44	2.85	3.90	1471.
224	4.33	33.806	222	26.828	125.3	4.31	122.9	4.02	4.05	3.04	1470.
269	4.08	33.853	267	26.891	119.5	4.06	116.8	4.58	5.44	2.10	1470.
373	3.83	33.988	370	27.024	107.7	3.80	104.2	5.75	9.29	1.17	1471.
468	3.70	34.095	464	27.122	99.1	3.67	94.9	6.73	13.48	0.87	1472.
502	3.57	34.161	557	27.187	93.5	3.53	88.6	7.64	18.22	0.75	1473.
751	3.23	34.285	744	27.318	82.0	3.18	76.1	9.29	29.29	0.56	1475.
939	2.91	34.370	930	27.415	73.5	2.85	66.8	10.75	41.82	0.61	1477.
1128	2.71	34.422	1117	27.475	68.6	2.63	61.1	12.09	55.96	0.69	1479.
1412	2.42	34.488	1397	27.552	62.0	2.32	53.7	13.94	79.83	0.77	1433.



DATE 17/ 2/74

REFERENCE NO. 74- 1- 13

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N, 145- 0.0 W GMT 18.1

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	UXY	SOUND
0	5.06	32.682	0	25.858	215.3	5.06	215.1	0.0	0.0	7.19	1468.
10	5.07	32.679	10	25.855	215.8	5.07	215.4	0.22	0.01	7.18	1468.
20	5.03	32.679	20	25.859	215.4	5.03	215.0	0.43	0.04	7.16	1453.
29	5.01	32.679	29	25.861	215.3	5.01	214.8	0.63	0.09	7.17	1463.
49	4.95	32.688	49	25.875	214.1	4.95	213.4	1.06	0.27	7.16	1459.
74	4.94	32.687	74	25.875	214.3	4.93	213.4	1.60	0.61	7.14	1469.
99	4.94	32.694	98	25.881	214.0	4.93	212.8	2.12	1.07	7.15	1469.
124	5.08	33.326	123	26.365	168.4	5.07	166.8	2.61	1.62	5.23	1471.
149	4.78	33.675	148	26.675	139.2	4.77	137.4	2.99	2.15	3.96	1471.
173	4.59	33.742	172	26.749	132.4	4.58	130.4	3.32	2.68	3.49	1470.
198	4.43	33.797	197	26.810	126.8	4.42	124.6	3.64	3.30	2.92	1470.
249	4.13	33.843	247	26.878	120.7	4.11	118.1	4.26	4.72	2.13	1470.
298	4.09	33.927	296	26.949	114.4	4.07	111.3	4.85	6.34	1.48	1471.
399	3.82	34.037	396	27.064	104.1	3.79	100.4	5.94	10.24	1.11	1471.
499	3.68	34.117	495	27.141	97.5	3.64	93.0	6.95	14.85	0.86	1472.
600	3.57	34.191	595	27.211	91.6	3.53	86.4	7.90	20.19	0.62	1474.
801	3.19	34.301	794	27.335	80.8	3.13	74.5	9.63	32.53	0.54	1476.
1001	2.98	34.375	991	27.422	73.2	2.81	66.1	11.16	46.57	0.61	1478.
1198	2.67	34.432	1186	27.486	67.8	2.59	60.0	12.55	62.15	0.71	1480.
1488	2.32	34.509	1472	27.577	59.8	2.22	51.2	14.40	87.40	0.91	1483.

RESULTS OF STD OBSERVATIONS

(P-74-1)

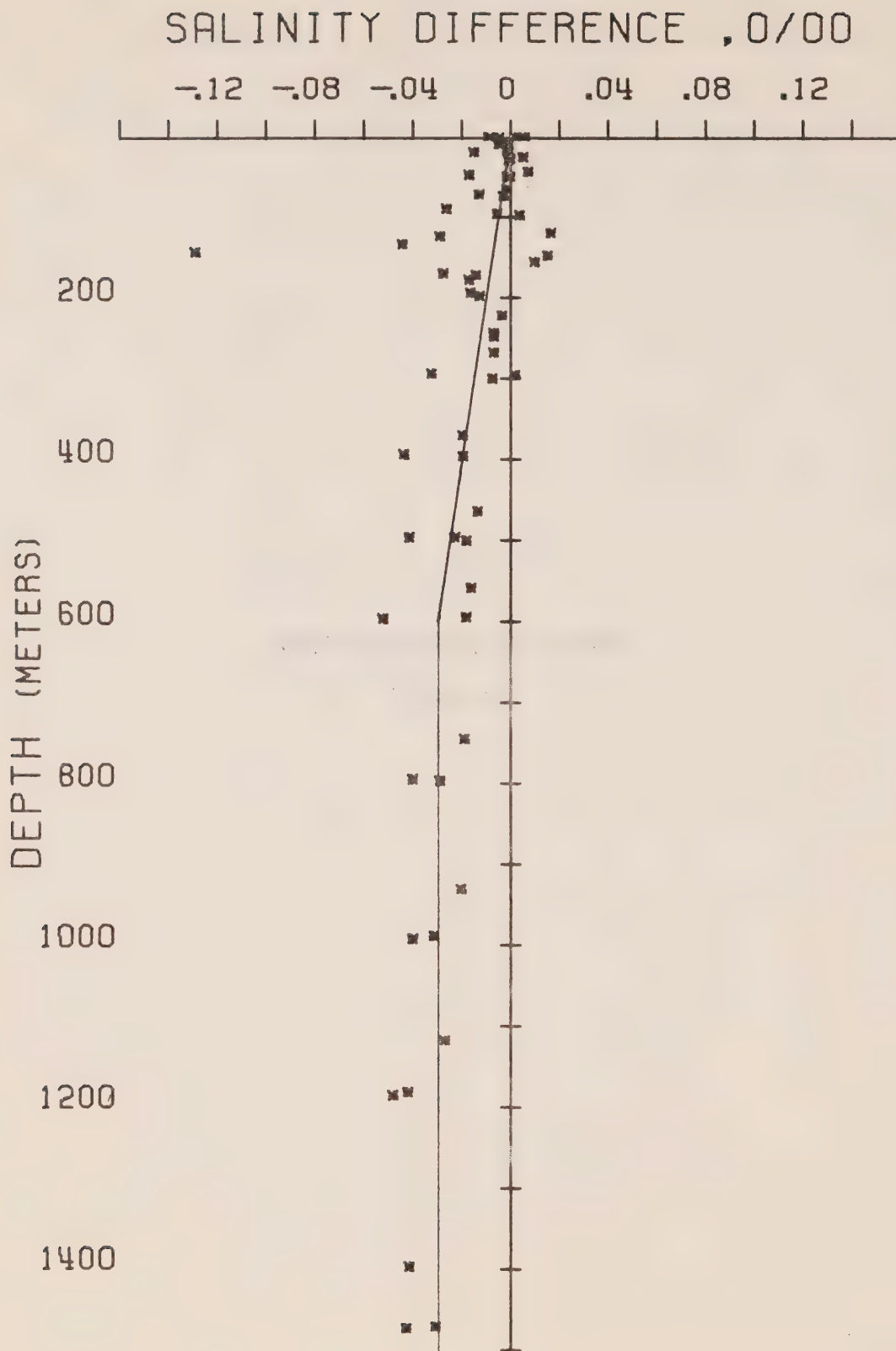


Figure 5 Salinity difference between hydro data and STD. P-74-1

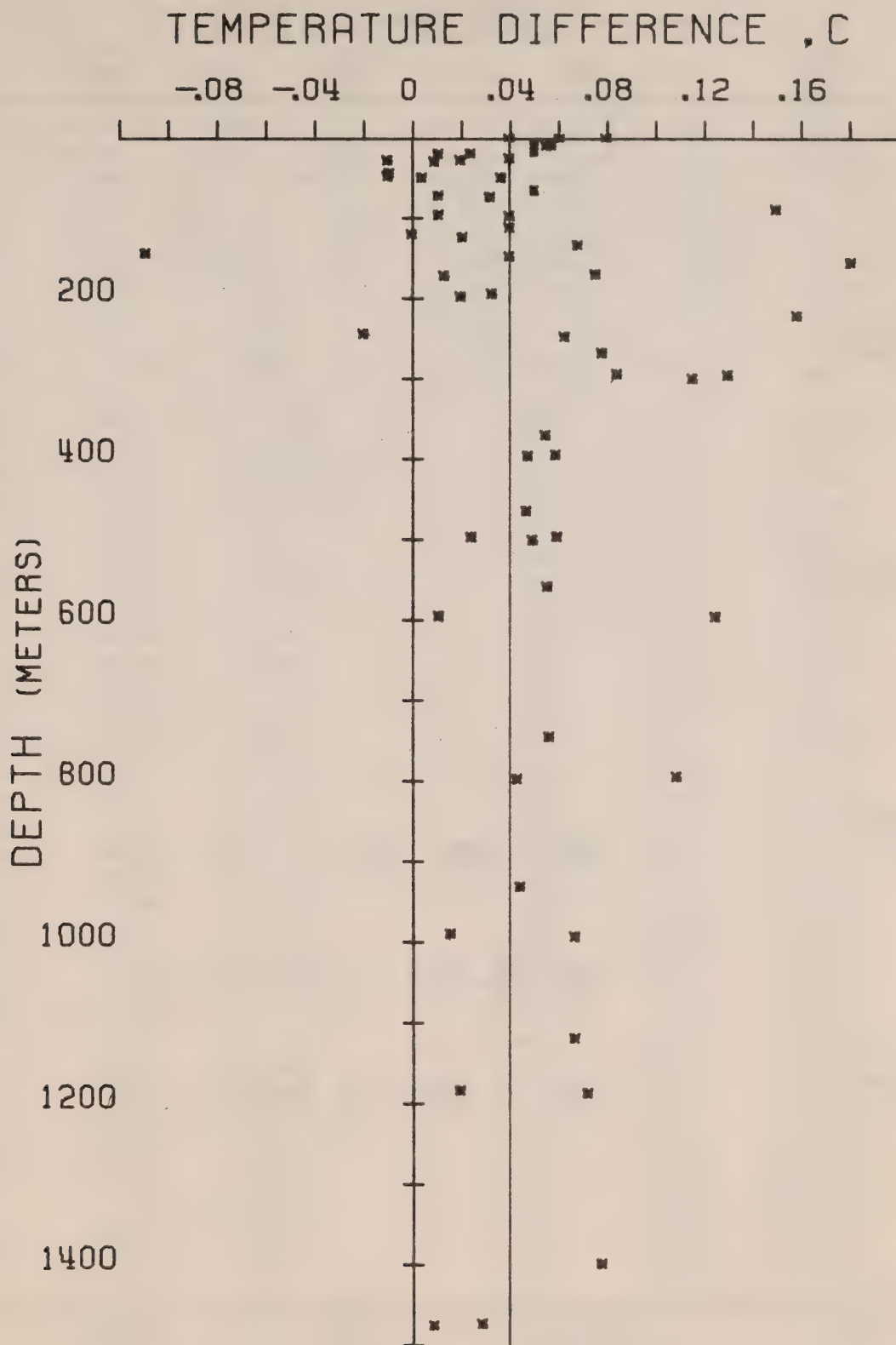
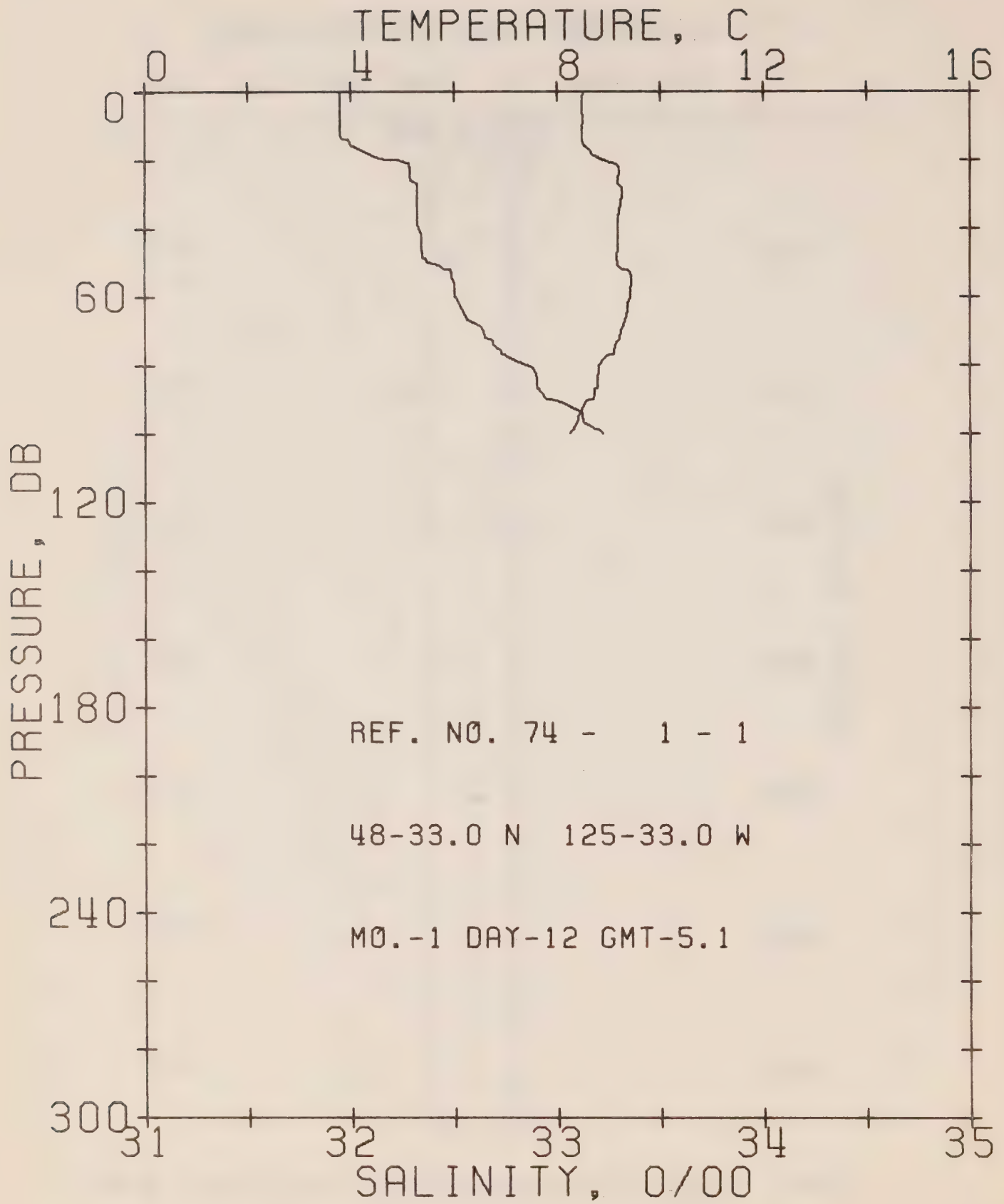


Figure 6 Temperature difference between hydro data and STD. P-74-1



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REFERENCE NO. 74- 1- 1

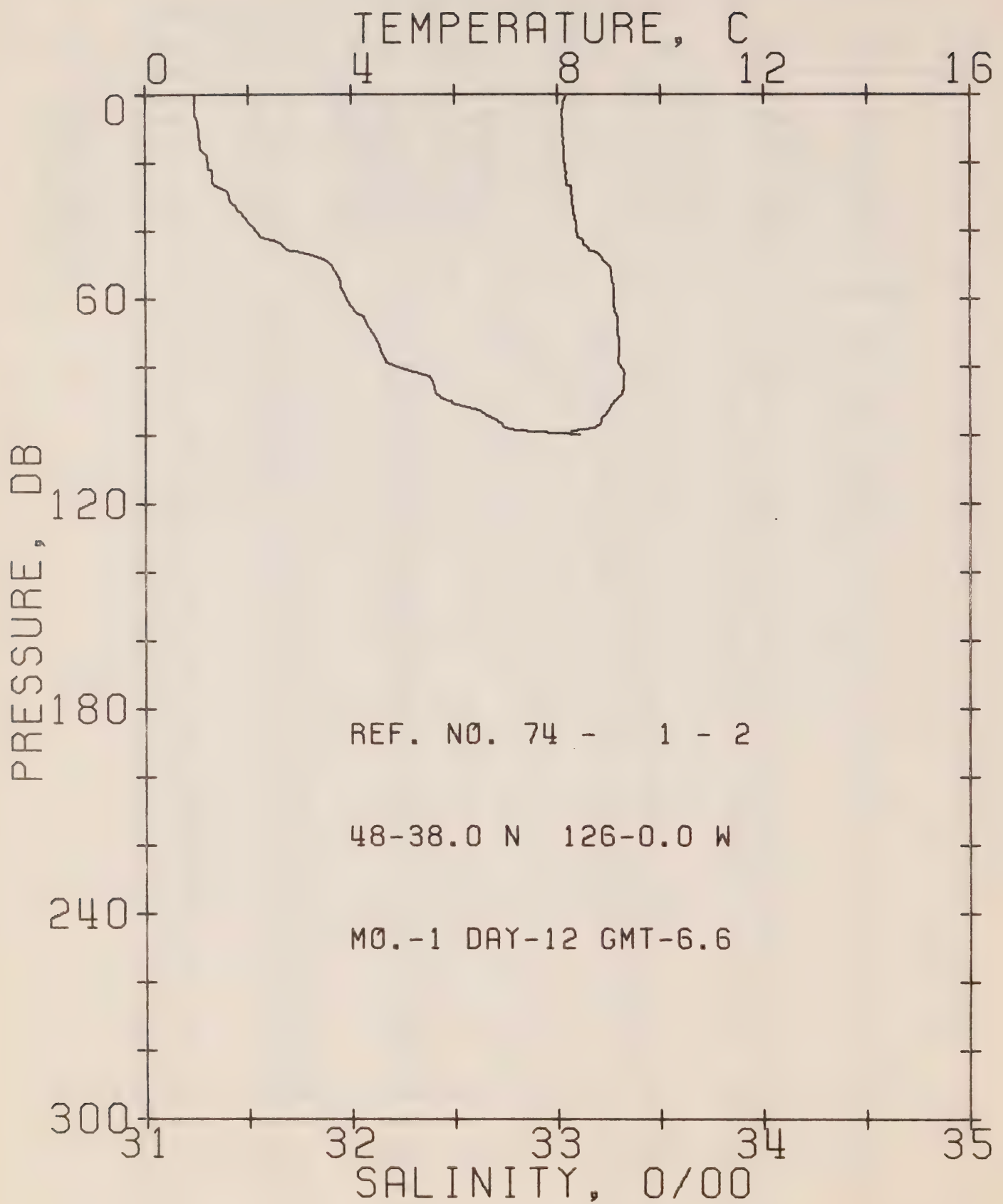
DATE 12/ 1/74

POSITION 48-33.0N, 125-33.0W GMT 5.1

RESULTS OF STP CAST 83 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.51	31.95	0	24.83	312.7	0.0	0.0	1481.
10	8.48	31.95	10	24.84	312.7	0.31	0.02	1481.
20	8.89	32.17	20	24.95	302.3	0.62	0.06	1483.
30	9.25	32.32	30	25.01	296.7	0.92	0.14	1485.
50	9.16	32.37	50	25.06	292.1	1.51	0.38	1485.
75	9.11	32.71	75	25.33	266.5	2.21	0.83	1485.
100	8.24	33.22	99	25.87	216.2	2.82	1.36	1483.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	8.51	31.95	52.	9.36	32.48
2.	8.48	31.95	53.	9.41	32.48
4.	8.49	31.95	53.	9.42	32.49
6.	8.49	31.95	54.	9.43	32.49
7.	8.50	31.95	55.	9.43	32.49
9.	8.50	31.95	56.	9.44	32.50
10.	8.48	31.95	58.	9.42	32.50
13.	8.48	31.95	60.	9.42	32.50
14.	8.48	31.96	60.	9.41	32.51
14.	8.49	31.99	62.	9.37	32.52
16.	8.54	32.00	63.	9.37	32.53
16.	8.55	32.01	64.	9.36	32.54
17.	8.60	32.04	67.	9.31	32.56
19.	8.71	32.10	68.	9.27	32.61
20.	8.89	32.17	69.	9.24	32.63
20.	8.93	32.23	70.	9.22	32.64
21.	9.00	32.27	72.	9.21	32.65
21.	9.08	32.28	73.	9.17	32.69
22.	9.19	32.28	74.	9.13	32.69
23.	9.19	32.29	76.	9.09	32.73
24.	9.20	32.29	77.	9.08	32.73
25.	9.13	32.29	77.	9.01	32.74
25.	9.17	32.29	78.	8.91	32.77
27.	9.17	32.32	80.	8.81	32.85
28.	9.24	32.32	81.	8.80	32.88
29.	9.26	32.32	84.	8.77	32.90
30.	9.25	32.32	85.	8.77	32.90
35.	9.21	32.32	87.	8.77	32.90
36.	9.19	32.32	87.	8.72	32.91
36.	9.17	32.32	88.	8.71	32.92
38.	9.18	32.32	90.	8.69	32.95
39.	9.17	32.32	90.	8.62	32.97
40.	9.17	32.33	91.	8.53	33.02
42.	9.16	32.34	92.	8.50	33.06
45.	9.16	32.34	94.	8.44	33.12
46.	9.16	32.34	95.	8.39	33.12
48.	9.14	32.35	97.	8.38	33.13
49.	9.14	32.35	98.	8.32	33.17
49.	9.14	32.36	99.	8.31	33.18
50.	9.16	32.37	99.	8.30	33.20
51.	9.17	32.43	100.	8.24	33.22
52.	9.24	32.45			



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REFERENCE NO. 74- 1- 2

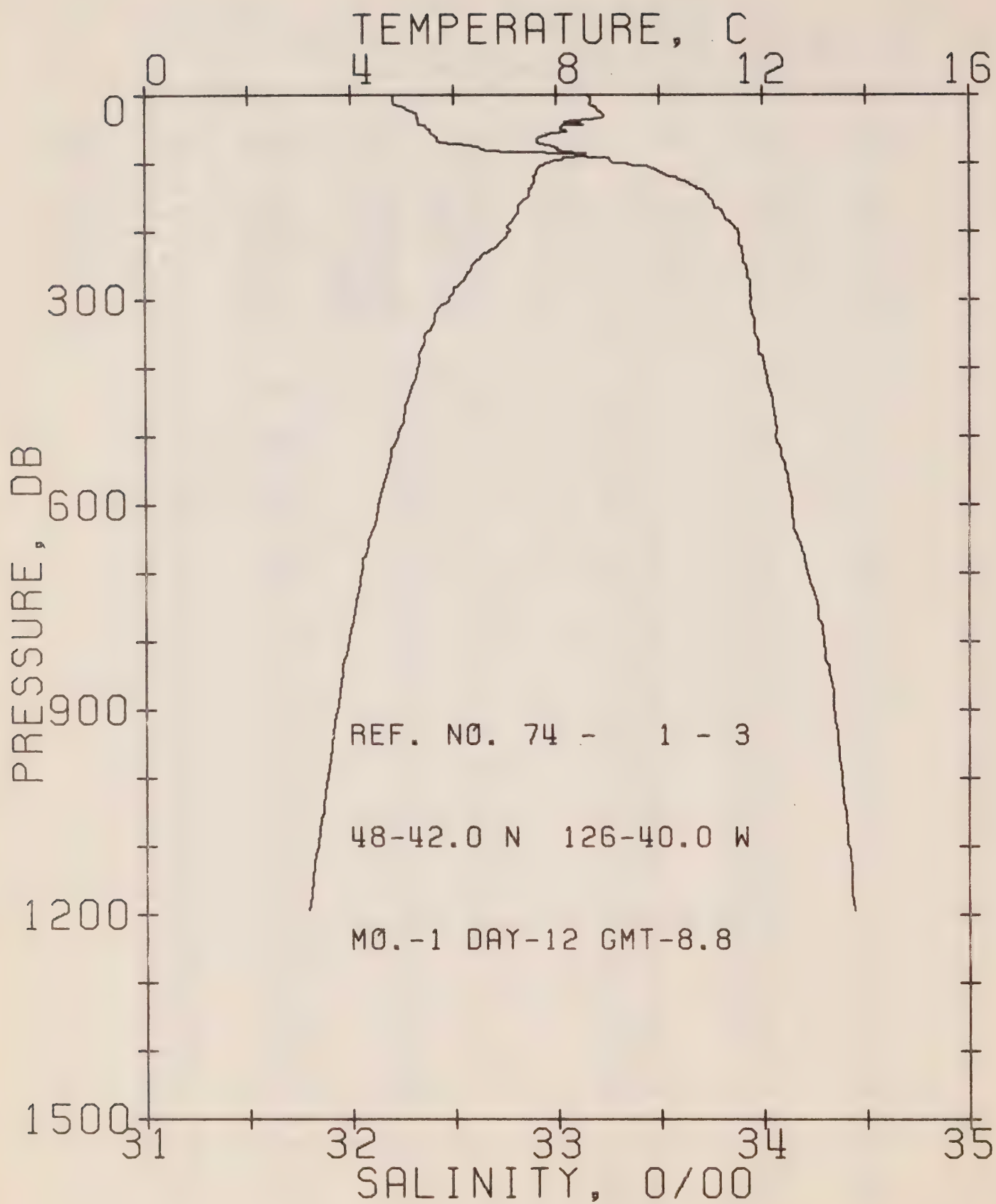
DATE 12/ 1/74

POSITION 48-38.0N, 126- 0.0W GMT 6.6

RESULTS OF STP CAST 69 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.15	31.24	0	24.33	360.6	0.0	0.0	1479.
10	8.10	31.25	10	24.35	359.1	0.36	0.02	1479.
20	8.15	31.30	20	24.38	356.2	0.72	0.07	1479.
30	8.28	31.41	30	24.44	350.3	1.07	0.16	1480.
50	8.98	31.90	50	24.72	324.2	1.75	0.44	1483.
75	9.19	32.14	75	24.88	310.0	2.55	0.95	1485.
100	8.27	33.11	99	25.78	224.8	3.26	1.58	1483.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	8.15	31.24	47.	8.80	31.79
1.	8.15	31.24	48.	8.89	31.85
2.	8.11	31.24	49.	8.91	31.88
6.	8.09	31.24	50.	8.98	31.90
3.	8.10	31.25	51.	9.03	31.91
12.	8.10	31.26	52.	9.04	31.92
13.	8.12	31.26	55.	9.07	31.95
14.	8.11	31.27	56.	9.08	31.95
16.	8.12	31.27	57.	9.08	31.95
18.	8.14	31.30	61.	9.09	31.98
22.	8.16	31.31	64.	9.13	32.02
22.	8.16	31.32	65.	9.16	32.06
23.	8.18	31.33	66.	9.17	32.06
24.	8.15	31.33	67.	9.17	32.07
26.	8.18	31.33	69.	9.18	32.09
27.	8.19	31.34	70.	9.18	32.10
27.	8.26	31.35	72.	9.19	32.12
28.	8.26	31.39	75.	9.19	32.14
29.	8.27	31.40	79.	9.18	32.17
30.	8.28	31.41	81.	9.27	32.26
31.	8.28	31.41	82.	9.31	32.33
32.	8.30	31.42	83.	9.28	32.38
33.	8.31	31.44	86.	9.27	32.40
34.	8.33	31.45	88.	9.24	32.41
35.	8.33	31.47	90.	9.12	32.46
36.	8.35	31.48	90.	9.10	32.48
38.	8.36	31.51	91.	9.07	32.49
39.	8.38	31.52	93.	8.98	32.62
42.	8.40	31.56	94.	8.94	32.65
43.	8.50	31.62	95.	8.86	32.69
43.	8.50	31.63	97.	8.83	32.73
44.	8.50	31.66	98.	8.73	32.74
45.	8.62	31.68	99.	8.27	32.80
46.	8.62	31.71	100.	8.27	33.11
46.	8.71	31.73			



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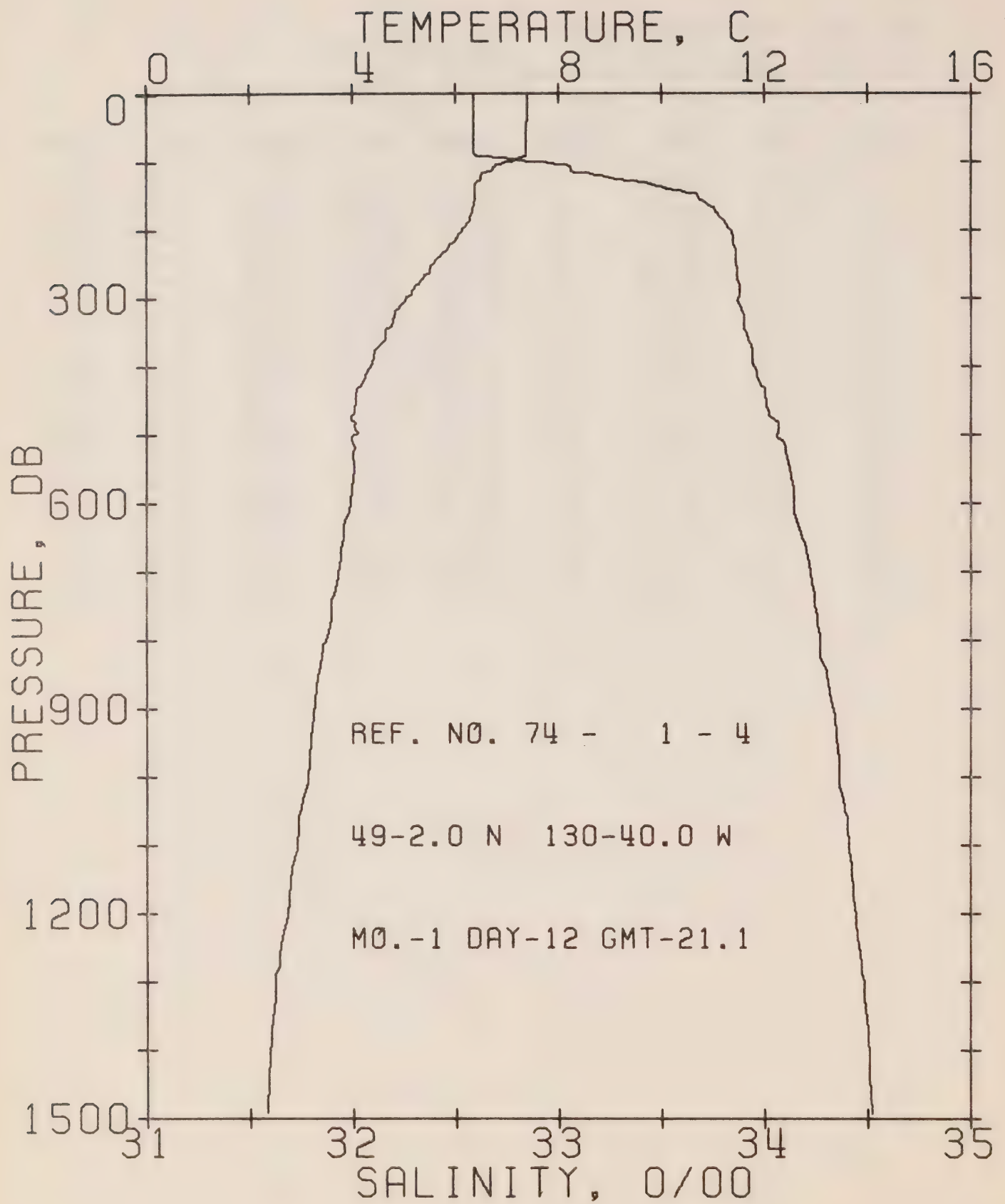
REFERENCE NO. 74- 1- 3

DATE 12/ 1/74

POSITION 48-42.0N, 126-40.0W GMT 8.8

RESULTS OF STD CAST 244 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.62	32.20	0	25.01	295.7	0.0	0.0	1482.
10	8.66	32.21	10	25.01	295.8	0.30	0.02	1482.
20	8.80	32.27	20	25.04	293.6	0.59	0.06	1483.
30	8.91	32.32	30	25.06	291.7	0.88	0.13	1483.
50	8.11	32.38	50	25.23	276.1	1.45	0.37	1481.
75	7.91	32.60	75	25.43	257.3	2.12	0.79	1431.
100	7.86	33.29	99	25.98	205.6	2.70	1.30	1482.
125	7.56	33.63	124	26.29	176.6	3.17	1.84	1481.
150	7.45	33.74	149	26.39	167.3	3.59	2.44	1482.
175	7.22	33.81	174	26.48	159.2	4.00	3.11	1481.
200	7.07	33.88	199	26.55	152.5	4.39	3.85	1481.
225	6.78	33.90	223	26.61	147.4	4.76	4.67	1480.
250	6.35	33.92	248	26.68	140.7	5.12	5.54	1479.
300	5.91	33.95	293	26.76	133.8	5.81	7.46	1478.
400	5.27	34.01	397	26.88	122.4	7.09	12.01	1477.
500	4.91	34.06	496	26.97	115.5	8.27	17.43	1478.
600	4.52	34.14	595	27.07	105.9	9.37	23.57	1478.
800	3.93	34.30	793	27.26	89.4	11.32	37.42	1479.
1000	3.51	34.38	991	27.37	79.9	13.00	52.82	1480.



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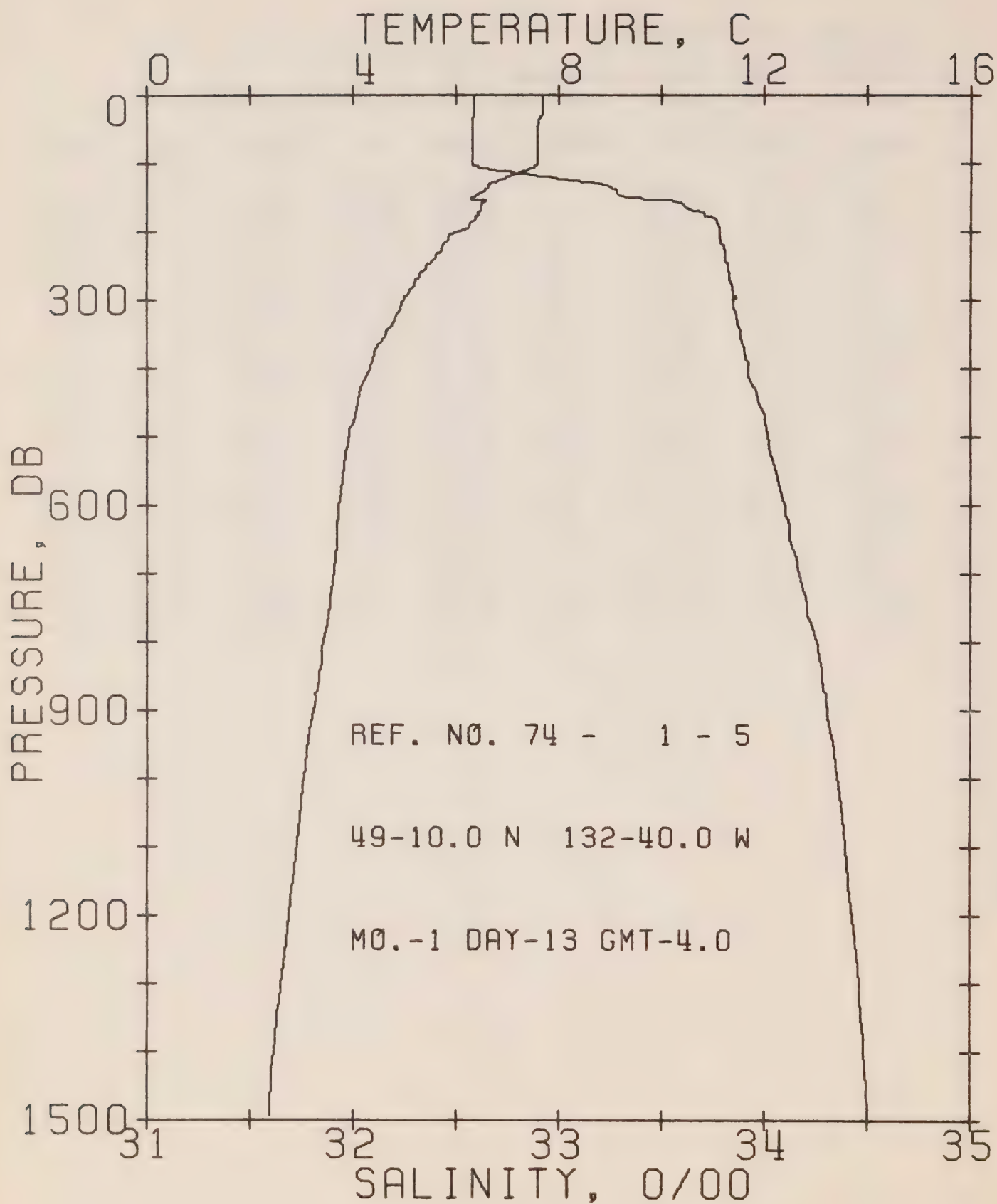
REFERENCE NO. 74- 1- 4

DATE 12/ 1/74

POSITION 49- 2.0N, 130-40.0W GMT 21.1

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.38	32.59	0	25.50	249.5	0.0	0.0	1477.
10	7.38	32.59	10	25.50	249.9	0.25	0.01	1478.
20	7.38	32.59	20	25.50	250.0	0.50	0.05	1478.
30	7.38	32.59	30	25.50	250.2	0.75	0.11	1478.
50	7.37	32.59	50	25.50	250.3	1.25	0.32	1478.
75	7.35	32.59	75	25.50	250.5	1.88	0.72	1478.
100	7.02	32.93	99	25.81	221.1	2.49	1.26	1478.
125	6.47	33.28	124	26.16	188.3	3.00	1.85	1477.
150	6.36	33.68	149	26.49	157.7	3.42	2.44	1477.
175	6.30	33.77	174	26.57	150.2	3.81	3.08	1478.
200	6.11	33.84	199	26.64	143.3	4.18	3.78	1477.
225	5.85	33.85	223	26.69	139.0	4.53	4.54	1477.
250	5.54	33.86	248	26.73	135.1	4.87	5.37	1476.
300	5.04	33.88	298	26.81	128.5	5.53	7.22	1475.
400	4.32	33.95	397	26.94	116.1	6.75	11.56	1473.
500	4.03	34.06	496	27.06	105.2	7.85	16.58	1474.
600	3.94	34.14	595	27.13	99.4	8.86	22.25	1475.
800	3.47	34.27	793	27.28	86.1	10.70	35.36	1477.
1000	3.12	34.36	990	27.39	77.0	12.31	50.09	1479.
1200	2.72	34.44	1188	27.49	67.9	13.74	66.13	1480.



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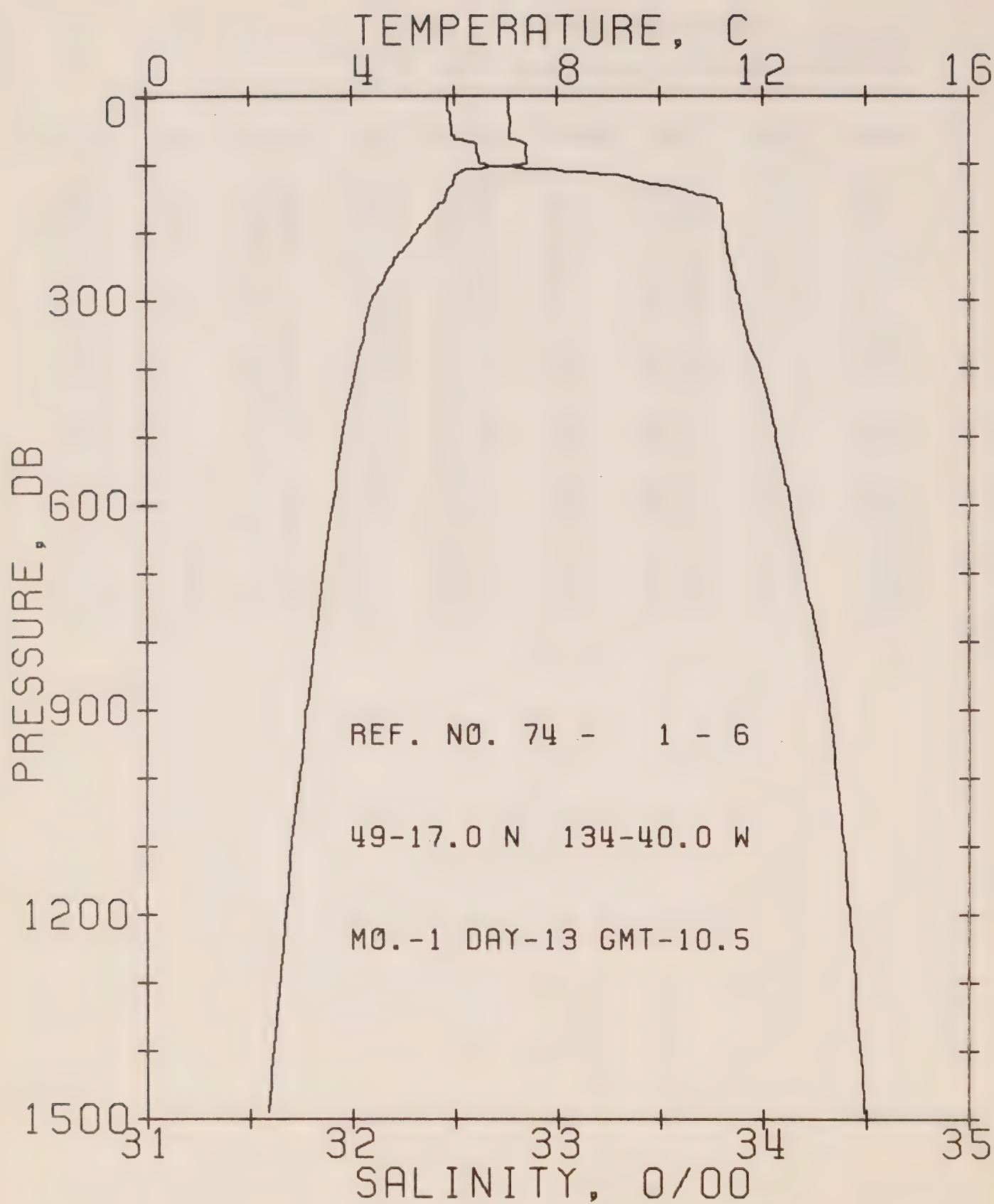
REFERENCE NO. 74- 1- 5

DATE 13/ 1/74

POSITION 49-10.0N, 132-40.0W GMT 4.0

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.67	32.59	0	25.45	253.4	0.0	0.0	1479.
10	7.67	32.59	10	25.45	253.8	0.25	0.01	1479.
20	7.67	32.59	20	25.45	253.9	0.51	0.05	1479.
30	7.66	32.59	30	25.46	253.9	0.76	0.12	1479.
50	7.58	32.58	50	25.46	253.9	1.27	0.32	1479.
75	7.57	32.58	75	25.46	254.1	1.90	0.73	1479.
100	7.57	32.58	99	25.46	254.4	2.54	1.30	1480.
125	6.83	33.07	124	25.95	208.5	3.13	1.97	1478.
150	6.32	33.36	149	26.25	180.4	3.61	2.64	1477.
175	6.42	33.71	174	26.56	156.3	4.03	3.33	1478.
200	6.04	33.78	199	26.61	146.6	4.40	4.05	1477.
225	5.71	33.80	223	26.67	141.4	4.76	4.83	1476.
250	5.42	33.82	248	26.72	136.8	5.11	5.67	1475.
300	4.98	33.84	293	26.78	130.6	5.78	7.53	1474.
400	4.32	33.92	397	26.92	118.3	7.02	11.95	1473.
500	3.91	34.01	496	27.04	107.6	8.14	17.09	1473.
600	3.71	34.10	595	27.12	99.8	9.18	22.92	1474.
800	3.42	34.25	793	27.27	86.9	11.07	36.32	1476.
1000	3.03	34.36	991	27.39	76.3	12.69	51.21	1478.
1200	2.74	34.43	1188	27.47	69.1	14.14	67.45	1480.



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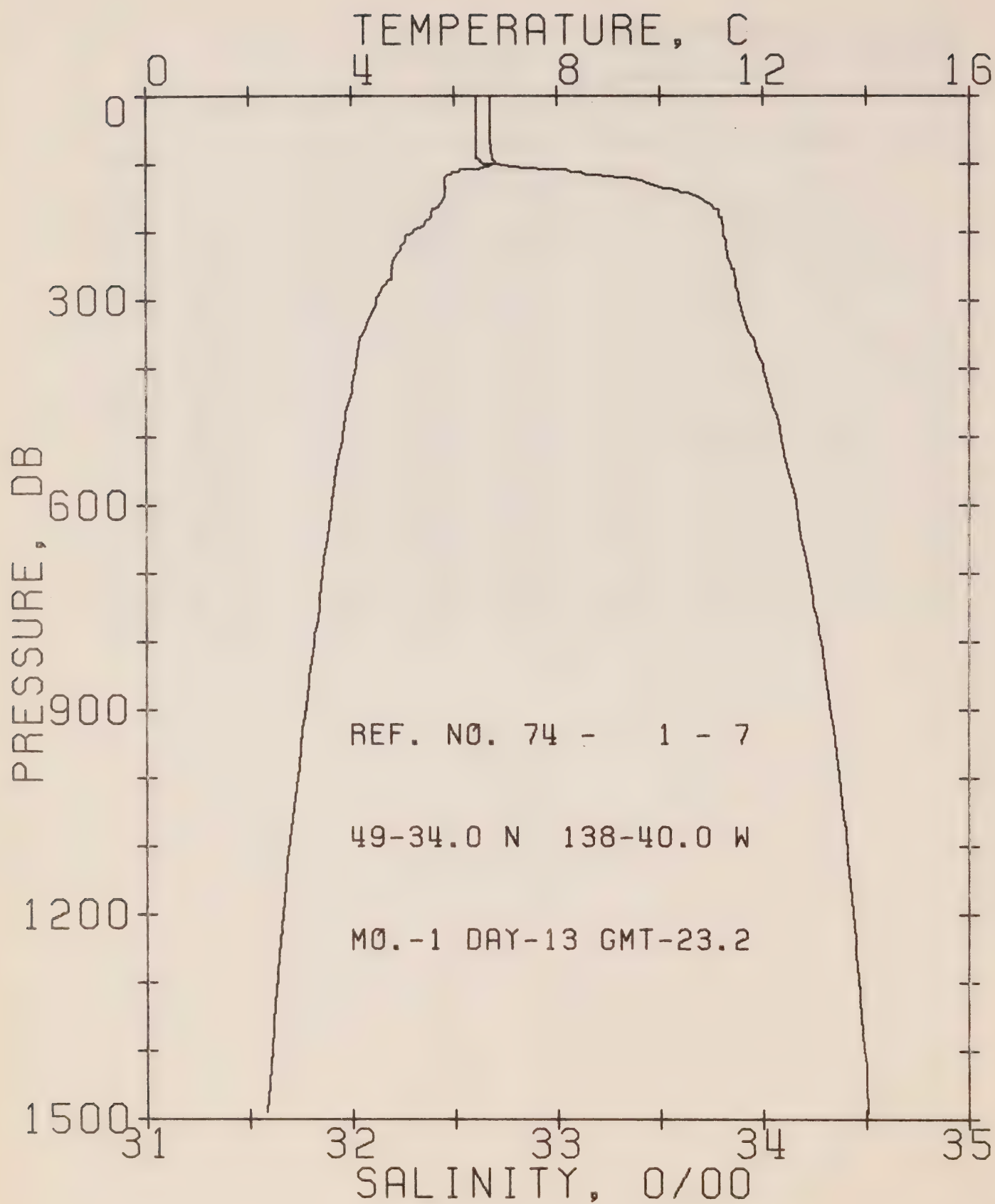
REFERENCE NO. 74- 1- 6

DATE 13/ 1/74

POSITION 49-17.0N, 134-40.0W GMT 10.5

RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.06	32.47	0	25.44	254.4	0.0	0.0	1476.
10	7.05	32.47	10	25.45	254.7	0.25	0.01	1475.
20	7.05	32.47	20	25.45	254.8	0.51	0.05	1476.
30	7.09	32.48	30	25.45	254.7	0.76	0.12	1477.
50	7.08	32.49	50	25.46	254.1	1.27	0.32	1477.
75	7.40	32.61	75	25.51	249.6	1.90	0.73	1479.
100	7.42	32.63	99	25.52	249.0	2.53	1.28	1479.
125	5.98	33.39	124	26.31	173.7	3.03	1.86	1475.
150	5.91	33.76	149	26.52	144.7	3.43	2.41	1475.
175	5.53	33.81	174	26.69	137.9	3.78	2.99	1474.
200	5.27	33.82	199	26.73	134.4	4.12	3.64	1474.
225	5.01	33.83	223	26.77	131.0	4.45	4.36	1473.
250	4.76	33.85	248	26.82	126.9	4.77	5.14	1473.
300	4.38	33.89	298	26.89	120.2	5.39	6.87	1472.
400	4.07	33.98	397	27.00	110.8	6.55	11.61	1472.
500	3.79	34.06	496	27.09	102.9	7.62	15.88	1473.
600	3.60	34.13	595	27.16	96.3	8.61	21.46	1474.
800	3.26	34.27	793	27.30	83.9	10.42	34.30	1476.
1000	2.95	34.36	990	27.40	75.1	12.00	48.78	1478.
1200	2.69	34.42	1188	27.48	68.8	13.44	64.87	1480.



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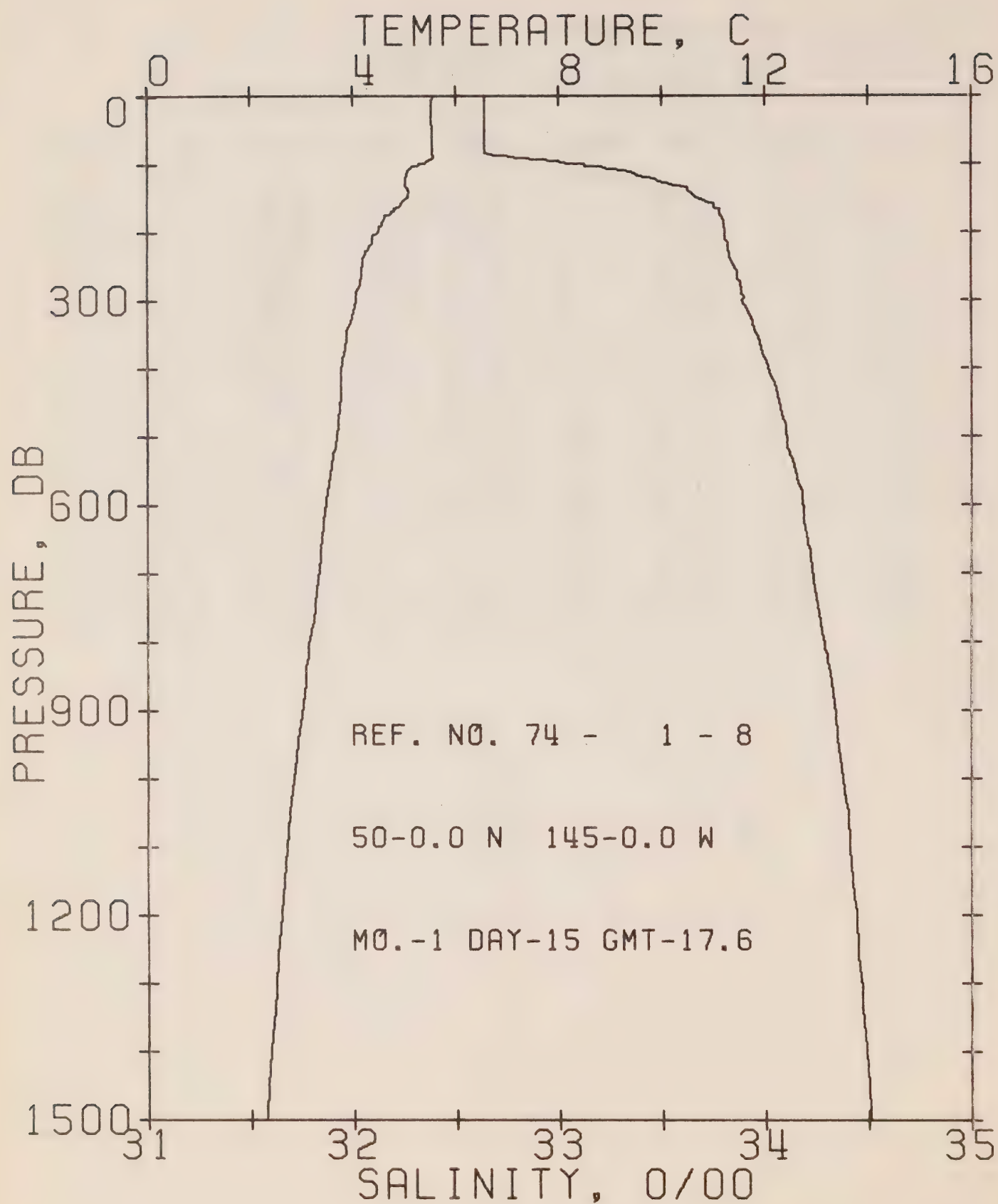
REFERENCE NO. 74- 1- 7

DATE 13/ 1/74

POSITION 49-34.0N, 133-40.0W GMT 23.2

RESULTS OF STP CAST 141 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.68	32.61	0	25.61	239.1	0.0	0.0	1475.
10	6.69	32.61	10	25.60	239.6	0.24	0.01	1475.
20	6.69	32.61	20	25.60	239.7	0.48	0.05	1475.
30	6.70	32.61	30	25.60	240.0	0.72	0.11	1475.
50	6.69	32.61	50	25.60	240.1	1.20	0.31	1476.
75	6.73	32.61	75	25.60	240.9	1.80	0.69	1476.
100	6.78	32.67	99	25.64	237.1	2.40	1.23	1477.
125	5.81	33.42	124	26.35	169.9	2.90	1.79	1474.
150	5.78	33.70	149	26.58	148.6	3.30	2.35	1475.
175	5.54	33.79	174	26.68	139.6	3.66	2.94	1474.
200	5.18	33.81	199	26.74	134.1	4.00	3.60	1473.
225	4.95	33.82	223	26.77	131.0	4.33	4.31	1473.
250	4.78	33.85	248	26.81	127.1	4.65	5.09	1473.
300	4.48	33.88	298	26.87	122.1	5.27	6.84	1472.
400	4.06	34.00	397	27.01	109.5	6.43	10.94	1472.
500	3.81	34.09	496	27.10	101.2	7.48	15.75	1473.
600	3.59	34.16	595	27.19	93.9	8.45	21.21	1474.
800	3.25	34.28	793	27.31	82.9	10.23	33.82	1476.
1000	2.93	34.37	990	27.41	74.0	11.79	48.16	1478.
1200	2.63	34.44	1188	27.49	67.0	13.20	63.93	1480.



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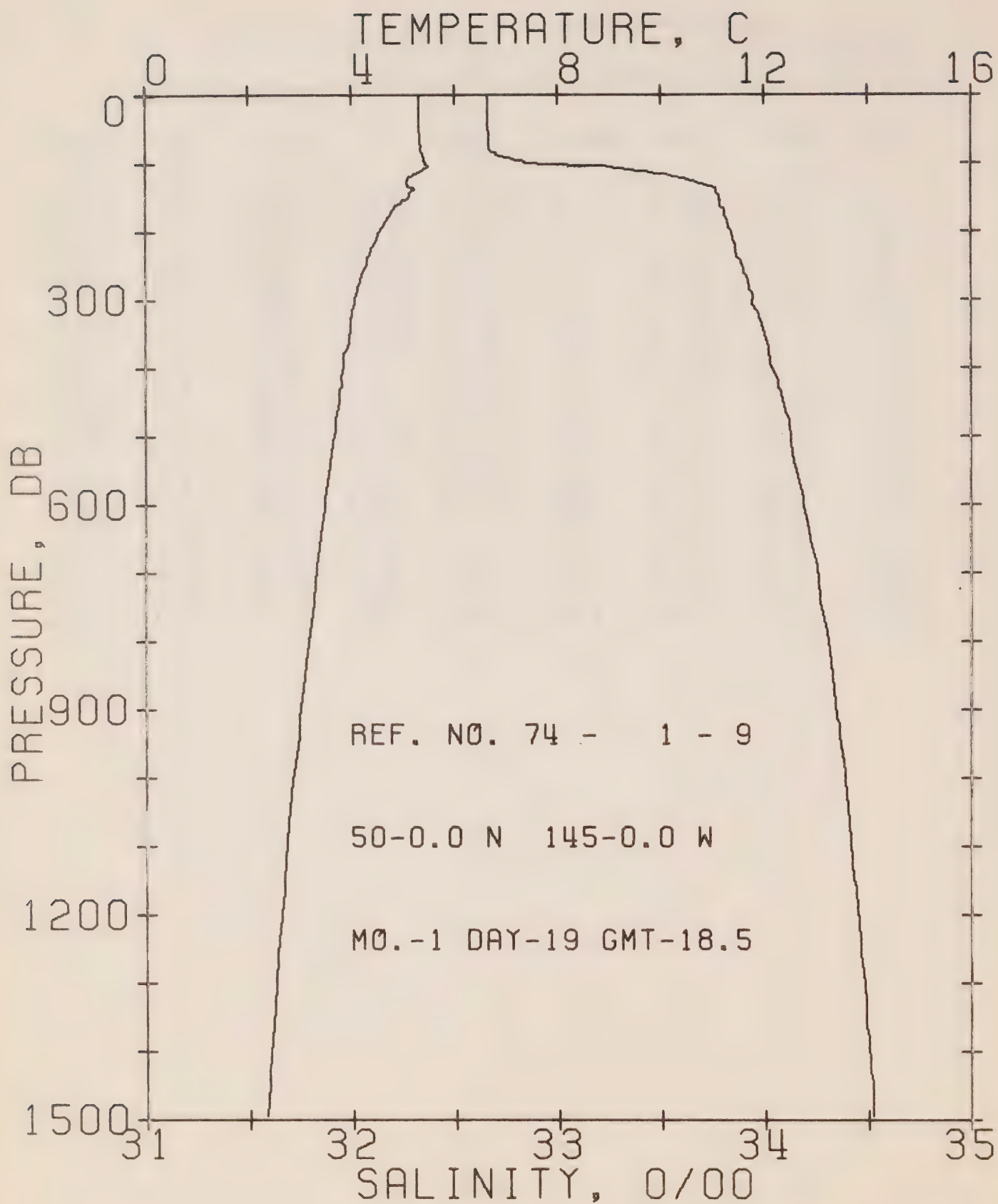
REFERENCE NO. 74- 1- 8

DATE 15/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.6

RESULTS OF STD CAST 148 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.54	32.64	0	25.77	223.5	0.0	0.0	1470.
10	5.53	32.64	10	25.77	223.6	0.22	0.01	1470.
20	5.53	32.64	20	25.77	223.7	0.45	0.05	1470.
30	5.53	32.64	30	25.77	223.8	0.67	0.10	1471.
50	5.54	32.64	50	25.77	224.2	1.12	0.29	1471.
75	5.54	32.64	75	25.77	224.5	1.68	0.64	1471.
100	5.32	33.09	99	26.15	188.6	2.21	1.12	1471.
125	5.01	33.48	124	26.49	156.2	2.64	1.60	1471.
150	5.06	33.67	149	26.64	142.7	3.01	2.12	1472.
175	4.68	33.78	174	26.77	130.5	3.34	2.67	1471.
200	4.49	33.81	199	26.81	126.4	3.66	3.28	1471.
225	4.30	33.82	223	26.84	124.0	3.98	3.96	1470.
250	4.17	33.85	248	26.88	120.7	4.28	4.70	1470.
300	4.05	33.89	298	26.93	116.4	4.87	6.35	1470.
400	3.78	34.01	397	27.05	105.4	5.98	10.29	1471.
500	3.67	34.11	496	27.13	98.3	6.99	14.93	1472.
600	3.46	34.18	595	27.22	90.9	7.94	20.22	1473.
800	3.14	34.29	793	27.33	81.3	9.67	32.55	1475.
1000	2.83	34.37	990	27.43	72.7	11.20	46.60	1477.
1200	2.58	34.44	1188	27.50	66.2	12.59	62.11	1480.



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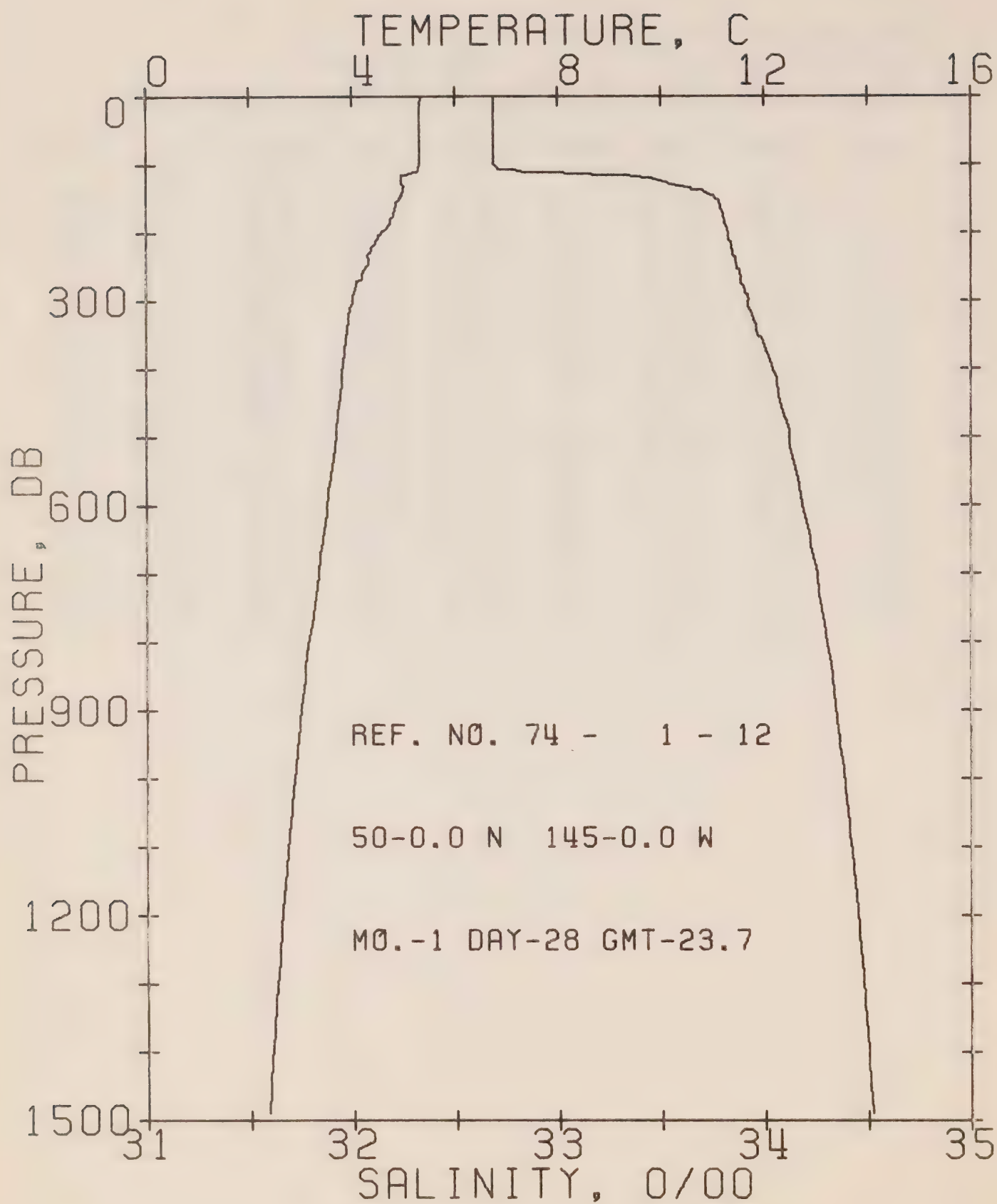
REFERENCE NO. 74- 1- 9

DATE 19/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.5

RESULTS OF STP CAST 145 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.32	32.66	0	25.81	219.5	0.0	0.0	1469.
10	5.32	32.66	10	25.81	219.8	0.22	0.01	1469.
20	5.32	32.66	20	25.81	219.9	0.44	0.04	1470.
30	5.32	32.66	30	25.81	220.0	0.66	0.10	1470.
50	5.32	32.66	50	25.81	220.0	1.10	0.28	1470.
75	5.35	32.67	75	25.82	220.0	1.65	0.63	1471.
100	5.45	32.85	99	25.95	208.0	2.19	1.11	1472.
125	5.07	33.65	124	26.62	144.1	2.61	1.59	1472.
150	5.10	33.78	149	26.72	135.0	2.95	2.07	1472.
175	4.75	33.81	174	26.79	129.0	3.28	2.61	1471.
200	4.54	33.84	199	26.83	124.8	3.60	3.22	1471.
225	4.37	33.86	223	26.87	121.7	3.91	3.89	1471.
250	4.28	33.89	248	26.90	118.4	4.21	4.61	1471.
300	4.05	33.95	298	26.97	112.4	4.78	6.23	1471.
400	3.82	34.04	397	27.06	104.2	5.86	10.07	1471.
500	3.65	34.13	496	27.15	96.2	6.86	14.64	1472.
600	3.46	34.19	595	27.22	90.5	7.80	19.88	1473.
800	3.15	34.31	793	27.34	79.9	9.50	31.98	1475.
1000	2.84	34.39	990	27.44	71.7	11.01	45.85	1477.
1200	2.61	34.45	1188	27.51	65.9	12.39	61.27	1480.



OFFSHORE OCEANOGRAPHY GROUP

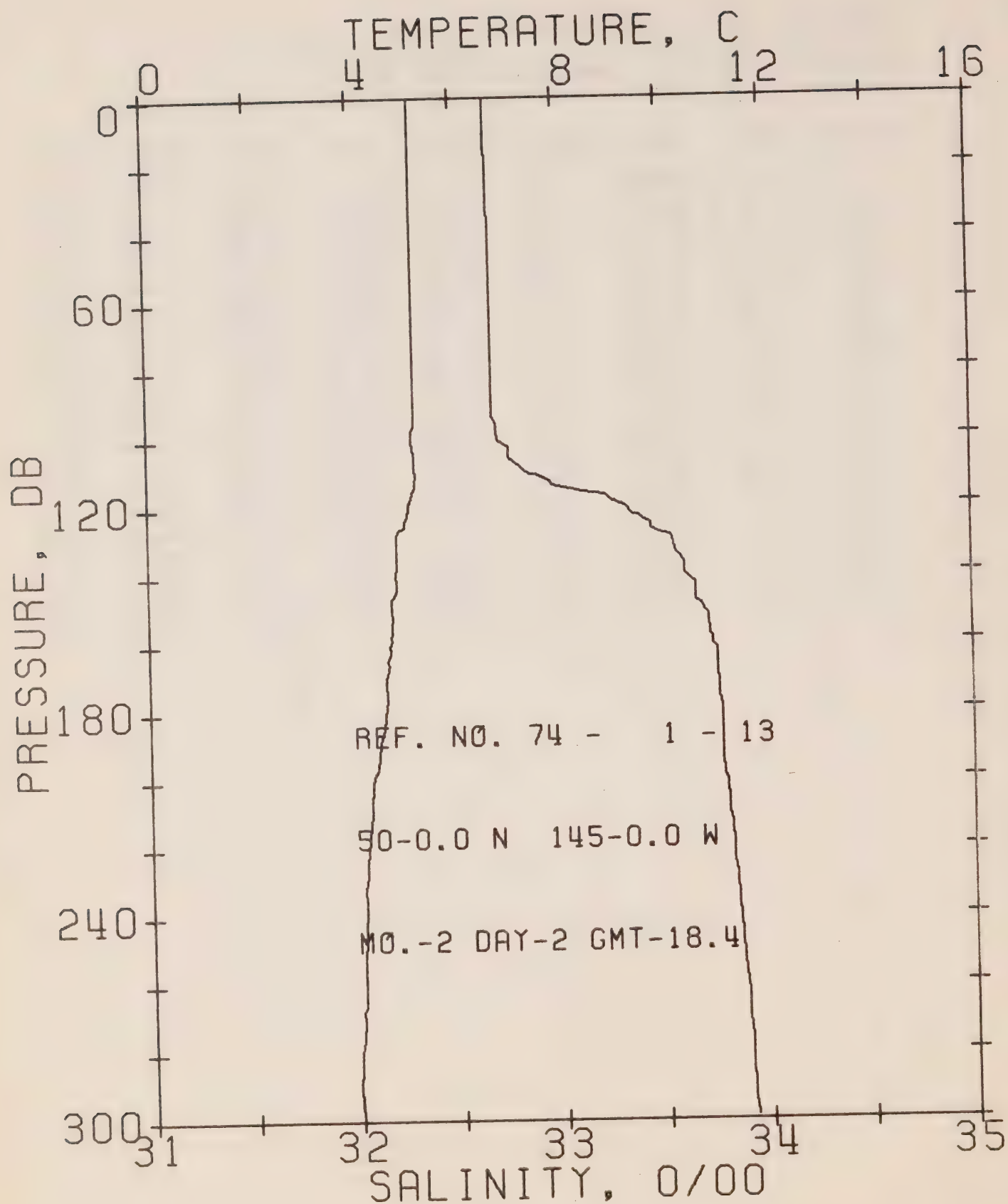
REFERENCE NO. 74- 1- 12

DATE 28/ 1/74

POSITION 50- 0.0N, 145- 0.0W GMT 23.7

RESULTS OF STP CAST 134 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.33	32.68	0	25.83	218.2	0.0	0.0	1469.
10	5.31	32.69	10	25.84	217.5	0.22	0.01	1469.
20	5.31	32.69	20	25.84	217.6	0.44	0.04	1470.
30	5.31	32.69	30	25.84	217.7	0.65	0.10	1470.
50	5.31	32.69	50	25.84	217.9	1.09	0.28	1470.
75	5.30	32.69	75	25.84	218.0	1.63	0.62	1470.
100	5.30	32.69	99	25.84	218.3	2.18	1.11	1471.
125	4.97	33.51	124	26.52	153.4	2.65	1.65	1471.
150	4.93	33.76	149	26.73	134.5	3.01	2.15	1472.
175	4.80	33.80	174	26.77	130.3	3.34	2.69	1471.
200	4.55	33.83	199	26.82	125.6	3.66	3.31	1471.
225	4.37	33.84	223	26.85	122.9	3.97	3.98	1471.
250	4.28	33.87	248	26.88	120.2	4.27	4.72	1471.
300	4.00	33.93	298	26.96	113.4	4.86	6.35	1470.
400	3.80	34.04	397	27.07	103.7	5.95	10.22	1471.
500	3.67	34.12	496	27.14	97.1	6.95	14.82	1472.
600	3.50	34.18	595	27.21	91.3	7.89	20.10	1473.
800	3.14	34.30	793	27.34	80.4	9.61	32.28	1475.
1000	2.85	34.38	990	27.43	72.1	11.13	46.21	1478.
1200	2.61	34.45	1188	27.51	65.8	12.51	61.65	1480.



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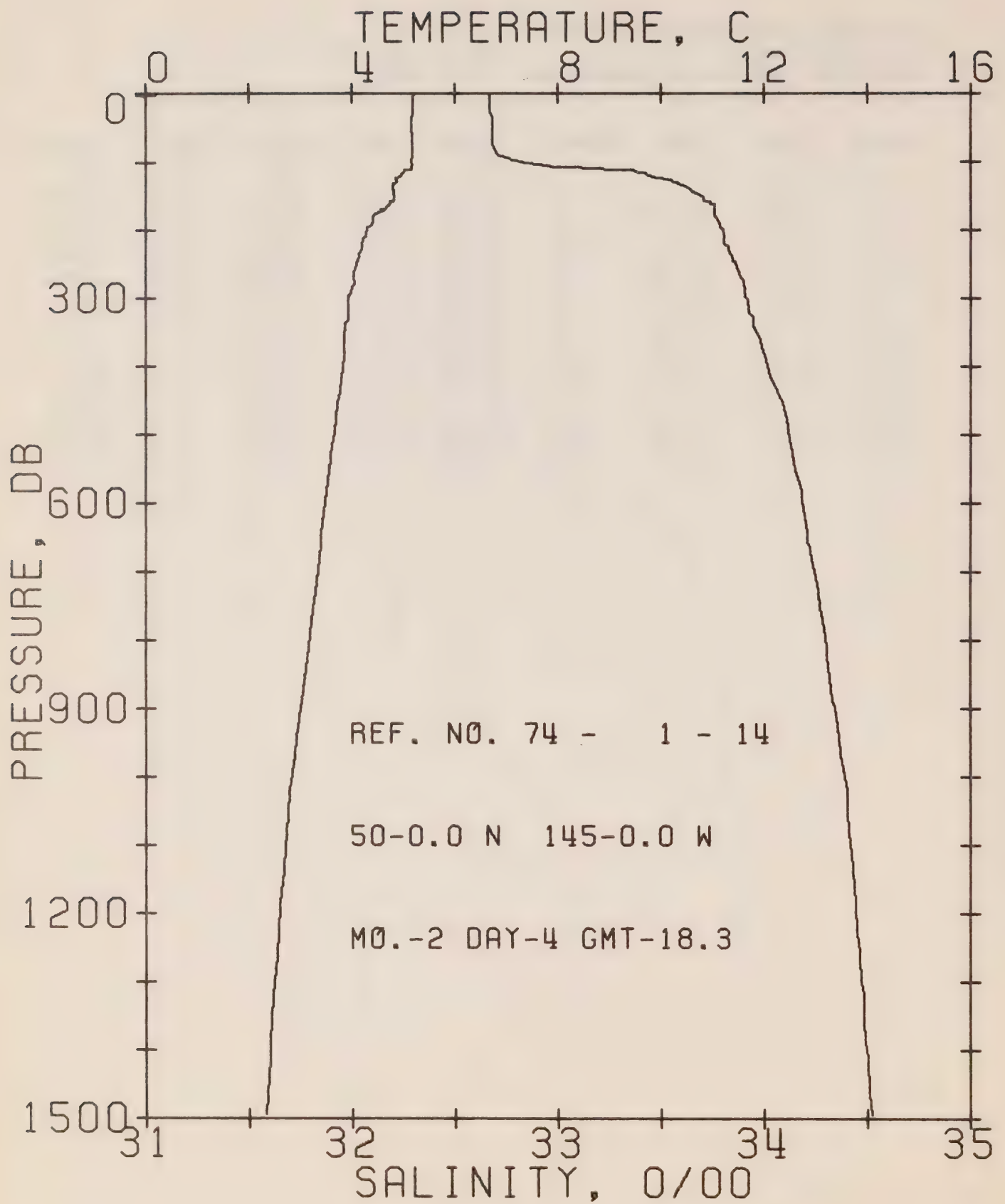
REFERENCE NO. 74- 1- 13

DATE 2/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.4

RESULTS OF STP CAST 94 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.19	32.67	0	25.83	217.3	0.0	0.0	1469.
10	5.19	32.67	10	25.83	217.7	0.22	0.01	1469.
20	5.19	32.67	20	25.84	217.6	0.44	0.04	1469.
30	5.19	32.68	30	25.84	217.4	0.65	0.10	1469.
50	5.19	32.68	50	25.84	217.3	1.09	0.28	1470.
75	5.20	32.68	75	25.84	217.6	1.63	0.62	1470.
100	5.15	32.71	99	25.87	215.3	2.17	1.11	1470.
125	4.98	33.45	124	26.47	158.0	2.66	1.66	1471.
150	4.72	33.69	149	26.70	137.1	3.02	2.17	1471.
175	4.61	33.77	174	26.77	130.5	3.35	2.72	1471.
200	4.31	33.79	199	26.82	125.7	3.67	3.33	1470.
225	4.16	33.83	223	26.87	121.6	3.98	4.00	1470.
250	4.10	33.87	248	26.90	118.7	4.28	4.72	1470.



OFFSHORE OCEANOGRAPHY GROUP

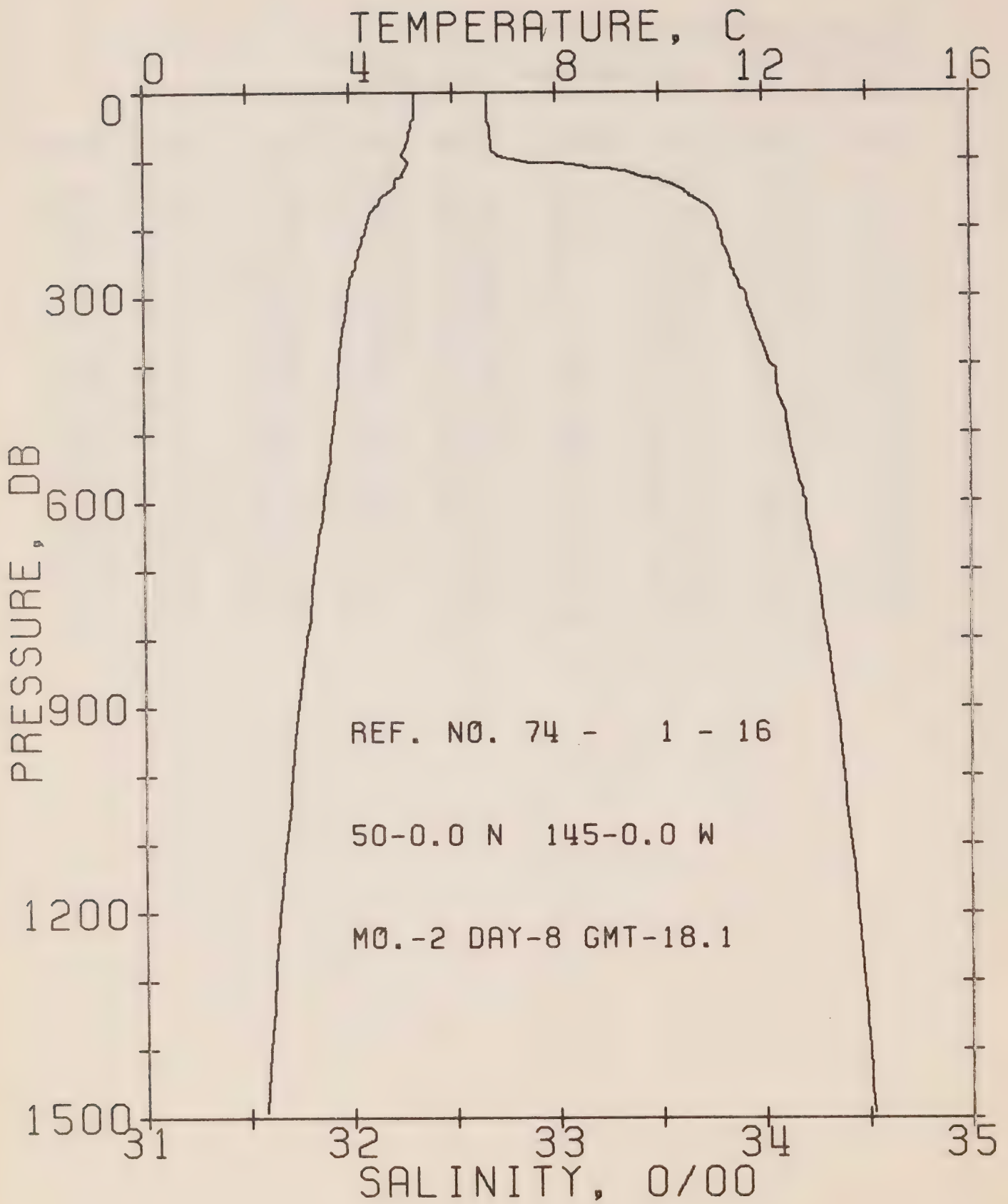
REFERENCE NO. 74- 1- 14

DATE 4/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.3

RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. FN	SOUND
0	5.19	32.67	0	25.83	217.3	0.0	0.0	1469.
10	5.17	32.67	10	25.84	217.5	0.22	0.01	1469.
20	5.17	32.67	20	25.84	217.6	0.43	0.04	1469.
30	5.17	32.67	30	25.84	217.4	0.65	0.10	1469.
50	5.16	32.68	50	25.84	217.0	1.09	0.28	1469.
75	5.17	32.68	75	25.84	217.4	1.63	0.62	1470.
100	5.14	32.81	99	25.95	207.5	2.16	1.10	1470.
125	4.86	33.54	124	26.56	150.0	2.60	1.60	1471.
150	4.82	33.69	149	26.68	138.4	2.96	2.10	1471.
175	4.46	33.76	174	26.78	129.6	3.30	2.66	1470.
200	4.29	33.80	199	26.83	125.1	3.62	3.27	1470.
225	4.19	33.83	223	26.86	122.3	3.93	3.94	1470.
250	4.08	33.86	248	26.90	118.8	4.23	4.66	1470.
300	3.92	33.91	298	26.96	113.6	4.81	6.29	1470.
400	3.80	34.02	397	27.05	105.6	5.90	10.19	1471.
500	3.64	34.12	496	27.15	97.0	6.91	14.80	1472.
600	3.46	34.18	595	27.21	91.1	7.85	20.05	1473.
800	3.16	34.30	793	27.33	80.8	9.57	32.27	1475.
1000	2.82	34.39	990	27.44	71.5	11.09	46.26	1477.
1200	2.59	34.44	1188	27.50	66.1	12.47	61.63	1480.



OFFSHORE OCEANOGRAPHY GROUP

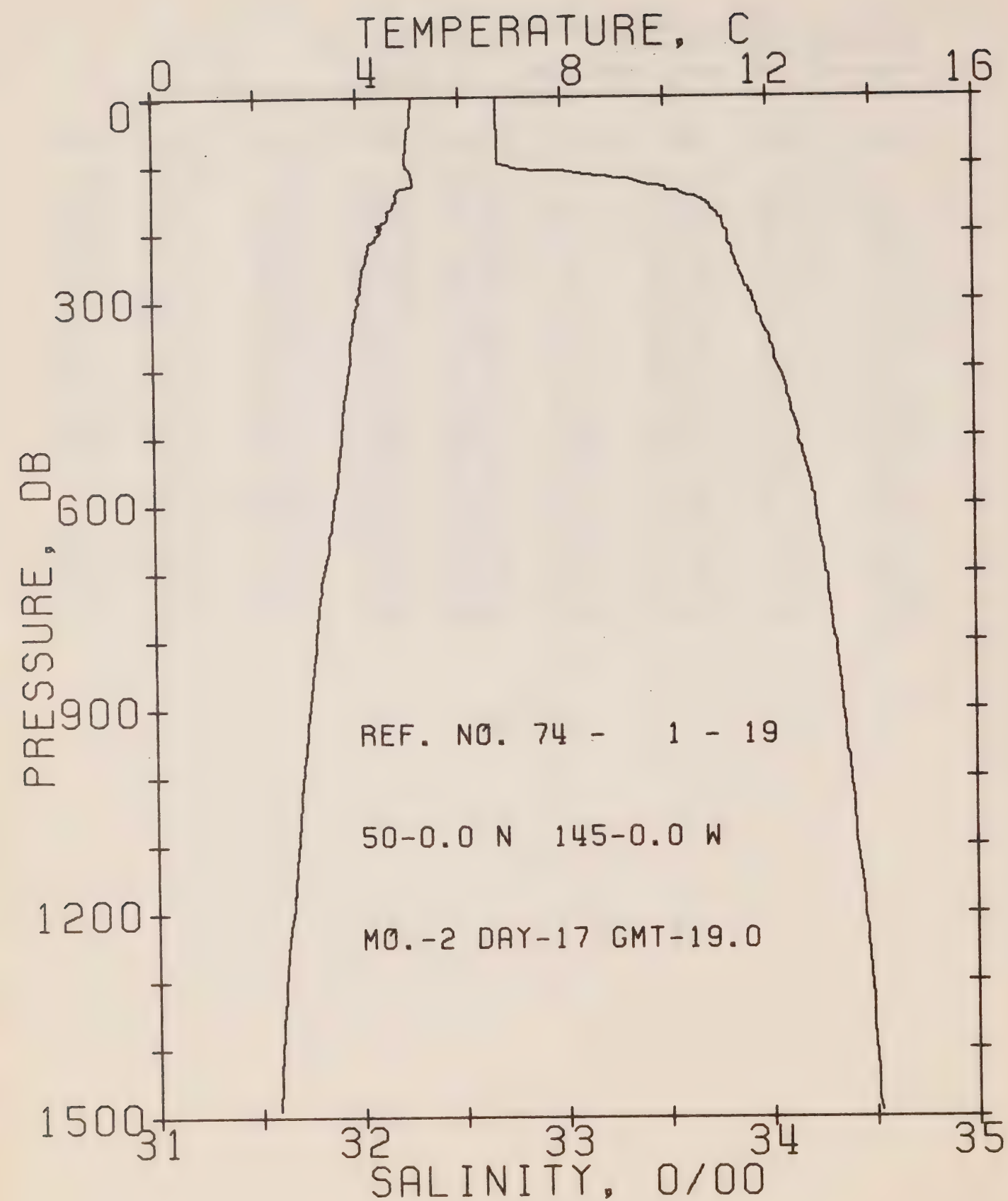
REFERENCE NO. 74- 1- 16

DATE 8/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.1

RESULTS OF STP CAST 141 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.25	32.67	0	25.83	218.1	0.0	0.0	1469.
10	5.24	32.67	10	25.83	218.3	0.22	0.01	1469.
20	5.24	32.67	20	25.83	218.3	0.44	0.04	1469.
30	5.24	32.67	30	25.83	218.4	0.65	0.10	1469.
50	5.20	32.68	50	25.84	217.6	1.09	0.28	1470.
75	5.10	32.69	75	25.86	215.8	1.63	0.62	1470.
100	5.10	32.82	99	25.96	206.4	2.17	1.10	1470.
125	4.91	33.43	124	26.47	158.7	2.61	1.61	1471.
150	4.68	33.65	149	26.67	139.9	2.98	2.12	1470.
175	4.41	33.76	174	26.78	129.4	3.32	2.68	1470.
200	4.29	33.79	199	26.82	125.9	3.64	3.29	1470.
225	4.19	33.81	223	26.85	123.5	3.95	3.96	1470.
250	4.11	33.84	248	26.88	120.4	4.25	4.70	1470.
300	3.94	33.92	298	26.96	113.3	4.84	6.34	1470.
400	3.77	34.03	397	27.07	103.9	5.93	10.22	1471.
500	3.64	34.12	495	27.15	96.9	6.93	14.79	1472.
600	3.46	34.20	595	27.23	89.7	7.86	20.04	1473.
800	3.12	34.30	793	27.34	80.1	9.57	32.14	1475.
1000	2.82	34.38	990	27.43	72.1	11.08	46.00	1477.
1200	2.58	34.45	1188	27.51	65.7	12.46	61.44	1480.



OFFSHORE OCEANOGRAPHY GROUP

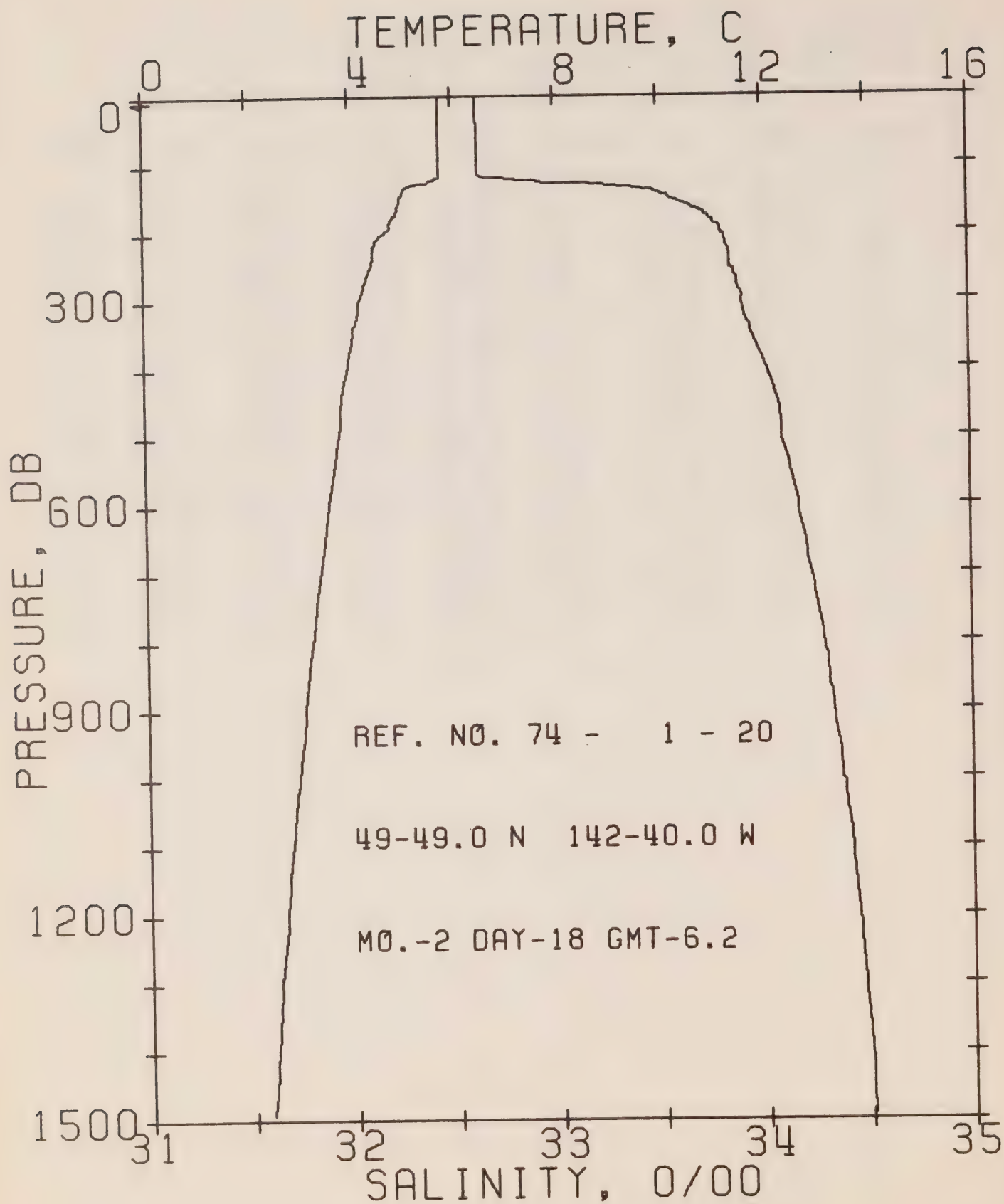
REFERENCE NO. 74- 1- 19

DATE 17/ 2/74

POSITION 50- 0.0N. 145- 0.0W GMT 19.0

RESULTS OF STD CAST 197 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.06	32.68	0	25.86	215.3	0.0	0.0	1468.
10	5.05	32.68	10	25.86	215.5	0.22	0.01	1468.
20	5.05	32.68	20	25.86	215.5	0.43	0.04	1468.
30	5.04	32.68	30	25.86	215.6	0.65	0.10	1469.
50	4.98	32.69	50	25.87	214.4	1.08	0.27	1469.
75	4.95	32.69	75	25.88	214.2	1.61	0.62	1469.
100	4.95	32.72	99	25.90	212.2	2.15	1.09	1469.
125	5.10	33.37	124	26.40	165.3	2.62	1.63	1471.
150	4.77	33.67	149	26.68	139.1	2.99	2.15	1471.
175	4.59	33.76	174	26.76	131.1	3.33	2.71	1471.
200	4.43	33.81	199	26.82	125.9	3.65	3.32	1470.
225	4.20	33.83	223	26.86	122.1	3.96	3.99	1470.
250	4.09	33.85	248	26.89	119.4	4.26	4.73	1470.
300	4.01	33.93	298	26.96	113.4	4.84	6.36	1470.
400	3.81	34.05	397	27.08	102.8	5.92	10.19	1471.
500	3.66	34.15	496	27.17	95.1	6.91	14.70	1472.
600	3.48	34.22	595	27.25	88.2	7.82	19.83	1473.
800	3.13	34.32	793	27.36	78.7	9.49	31.71	1475.
1000	2.85	34.39	990	27.44	71.9	11.00	45.51	1478.
1200	2.62	34.45	1188	27.50	66.0	12.38	60.95	1480.



OFFSHORE OCEANOGRAPHY GROUP

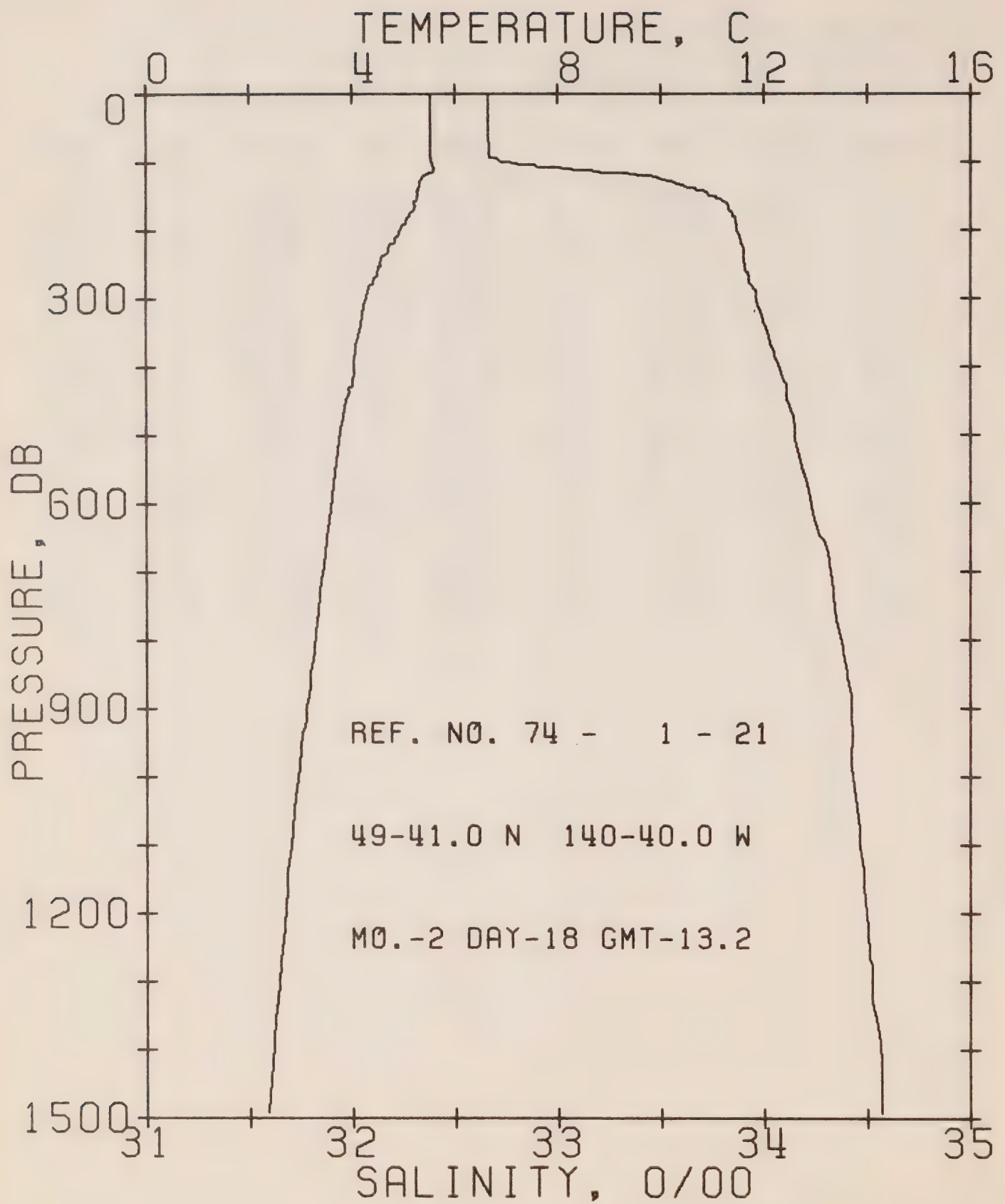
REFERENCE NO. 74- 1- 20

DATE 18/ 2/74

POSITION 49-49.0N, 142-40.0W GMT 6.2

RESULTS OF STP CAST 132 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.75	32.62	0	25.73	227.3	0.0	0.0	1471.
10	5.75	32.62	10	25.73	227.6	0.23	0.01	1471.
20	5.75	32.62	20	25.73	227.7	0.46	0.05	1471.
30	5.75	32.62	30	25.73	227.8	0.68	0.10	1471.
50	5.75	32.63	50	25.74	227.3	1.14	0.25	1472.
75	5.75	32.63	75	25.74	227.6	1.71	0.65	1472.
100	5.75	32.63	99	25.74	227.9	2.28	1.16	1473.
125	5.56	32.92	124	25.99	204.6	2.84	1.80	1473.
150	4.99	33.56	149	26.56	150.4	3.25	2.38	1471.
175	4.88	33.73	174	26.71	136.5	3.61	2.97	1472.
200	4.68	33.80	199	26.79	129.0	3.94	3.60	1471.
225	4.46	33.84	223	26.84	124.3	4.25	4.28	1471.
250	4.41	33.85	243	26.85	123.1	4.56	5.03	1471.
300	4.17	33.90	298	26.92	117.3	5.16	6.71	1471.
400	3.93	34.02	397	27.04	106.8	6.29	10.72	1472.
500	3.75	34.09	495	27.11	100.3	7.31	15.41	1473.
600	3.54	34.17	595	27.20	92.9	8.28	20.81	1474.
800	3.20	34.28	793	27.32	82.0	10.03	33.27	1476.
1000	2.91	34.37	990	27.42	74.0	11.58	47.50	1478.
1200	2.64	34.44	1188	27.50	66.8	12.98	63.16	1480.



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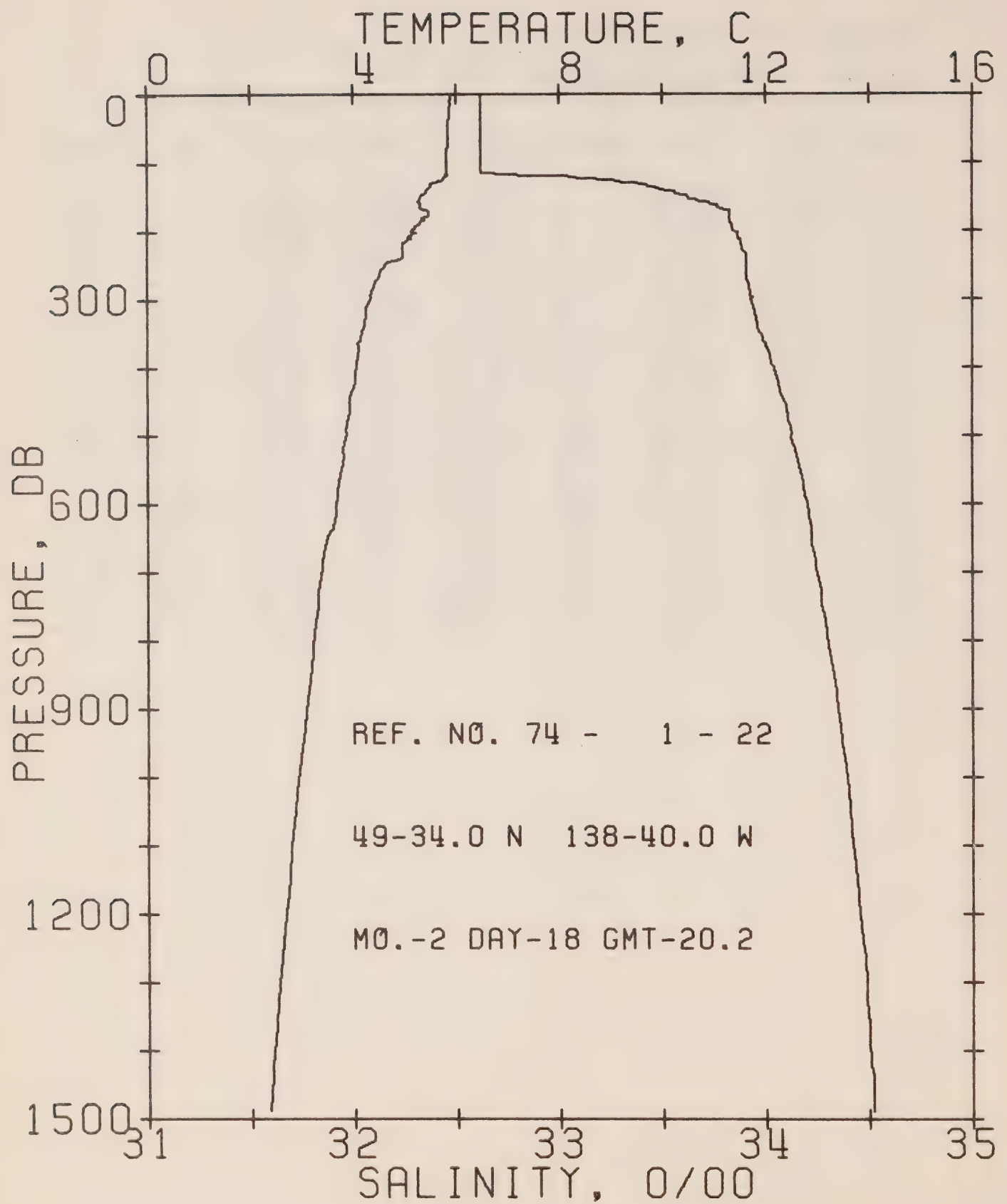
REFERENCE NO. 74- 1- 21

DATE 18/ 2/74

POSITION 49-41.0N, 140-40.0W GMT 13.2

RESULTS OF STD CAST 159 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.53	32.66	0	25.79	221.9	0.0	0.0	1470.
10	5.53	32.66	10	25.79	222.2	0.22	0.01	1470.
20	5.53	32.66	20	25.79	222.3	0.44	0.05	1470.
30	5.53	32.66	30	25.79	222.4	0.67	0.10	1471.
50	5.53	32.66	50	25.79	222.6	1.11	0.28	1471.
75	5.53	32.67	75	25.79	222.4	1.67	0.64	1471.
100	5.55	32.77	99	25.87	215.2	2.22	1.13	1472.
125	5.34	33.50	124	26.47	158.3	2.69	1.66	1472.
150	5.27	33.75	149	26.68	138.7	3.06	2.18	1473.
175	5.13	33.85	174	26.77	130.3	3.39	2.73	1473.
200	4.91	33.87	199	26.82	126.6	3.71	3.35	1472.
225	4.70	33.90	223	26.86	122.2	4.03	4.02	1472.
250	4.55	33.90	248	26.88	120.5	4.33	4.76	1472.
300	4.26	33.96	298	26.96	113.7	4.91	6.39	1471.
400	4.03	34.07	397	27.07	103.8	6.00	10.26	1472.
500	3.74	34.15	496	27.16	95.7	6.99	14.81	1473.
600	3.58	34.23	595	27.24	89.0	7.92	19.98	1474.
800	3.25	34.37	793	27.39	76.1	9.55	31.62	1476.
1000	2.93	34.43	990	27.46	69.9	11.00	44.84	1478.
1200	2.68	34.49	1188	27.53	63.4	12.32	59.70	1480.



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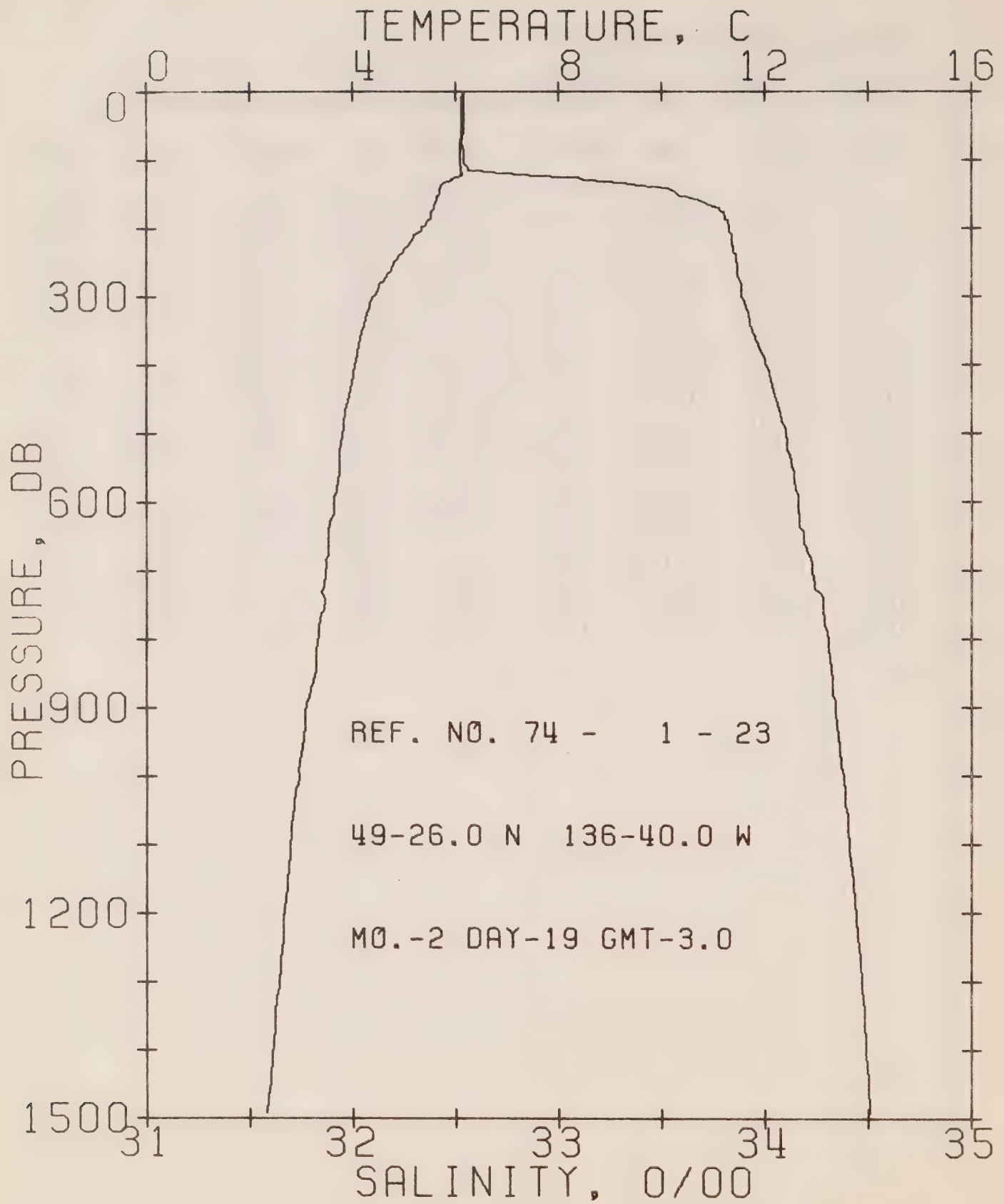
REFERENCE NO. 74- 1- 22

DATE 18/ 2/74

POSITION 49-34.0N, 138-40.0W GMT 20.2

RESULTS OF STP CAST 184 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.90	32.62	0	25.71	229.0	0.0	0.0	1472.
10	5.88	32.62	10	25.71	229.2	0.23	0.01	1472.
20	5.88	32.62	20	25.71	229.2	0.46	0.05	1472.
30	5.86	32.62	30	25.72	229.1	0.69	0.11	1472.
50	5.83	32.62	50	25.72	229.1	1.15	0.29	1472.
75	5.82	32.62	75	25.72	229.1	1.72	0.66	1472.
100	5.81	32.62	99	25.72	229.3	2.29	1.17	1473.
125	5.75	33.21	124	26.19	184.7	2.84	1.80	1474.
150	5.32	33.62	149	26.57	149.4	3.25	2.37	1473.
175	5.47	33.83	174	26.72	135.6	3.60	2.95	1474.
200	5.14	33.84	199	26.76	131.4	3.94	3.59	1473.
225	4.95	33.89	223	26.83	125.9	4.26	4.28	1473.
250	4.63	33.91	248	26.88	121.1	4.57	5.03	1472.
300	4.33	33.93	298	26.93	116.7	5.16	6.69	1472.
400	4.04	34.04	397	27.04	106.2	6.28	10.67	1472.
500	3.85	34.12	496	27.13	98.8	7.30	15.34	1473.
600	3.66	34.20	595	27.21	91.7	8.25	20.68	1474.
800	3.22	34.30	793	27.33	81.3	9.97	32.94	1476.
1000	2.92	34.39	990	27.43	72.4	11.51	46.96	1478.
1200	2.67	34.46	1188	27.51	66.0	12.89	62.43	1480.



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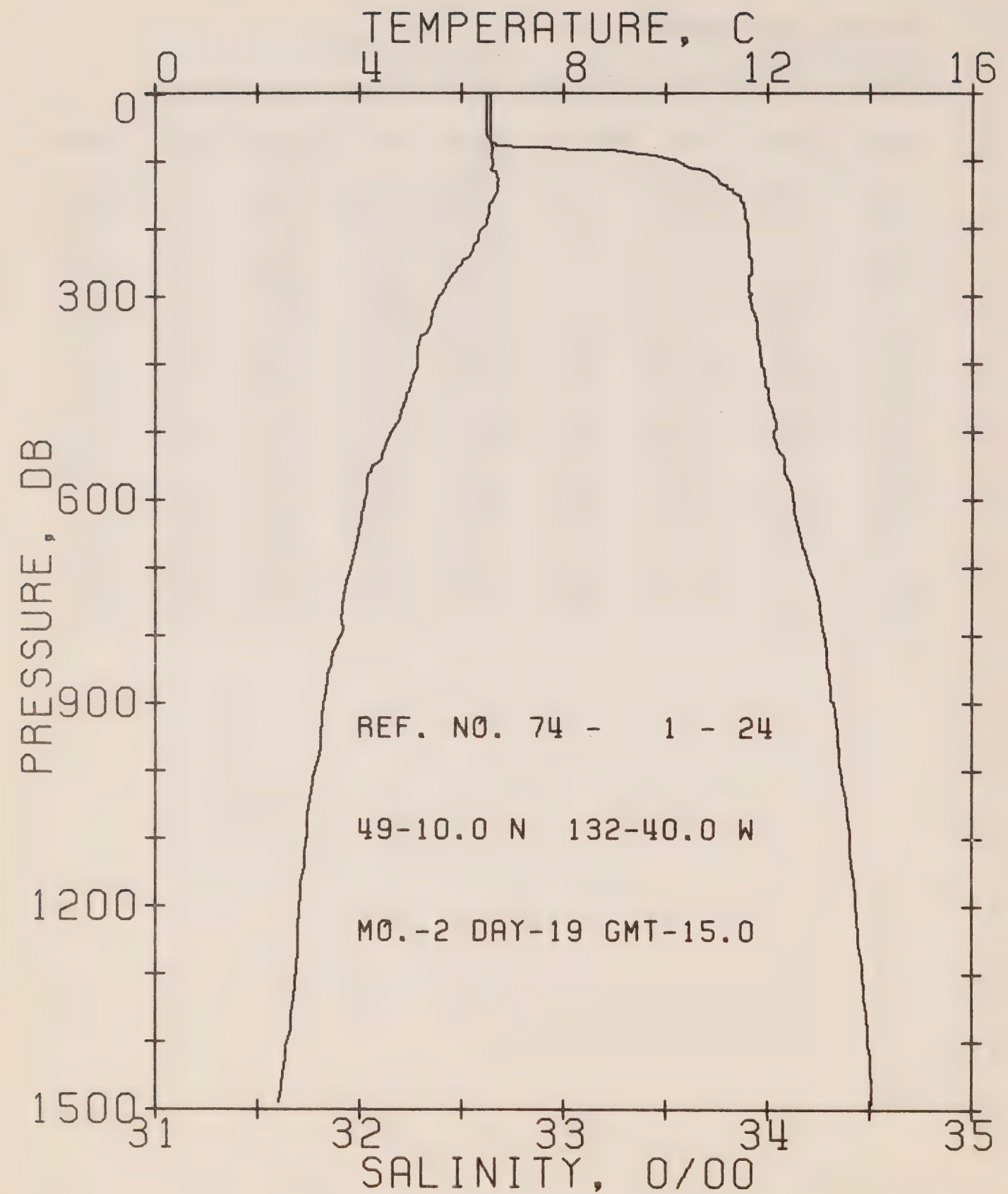
REFERENCE NO. 74- 1- 23

DATE 19/ 2/74

POSITION 49-26.0N, 136-40.0W GMT 3.0

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.12	32.54	0	25.62	237.6	0.0	0.0	1472.
10	6.10	32.54	10	25.62	237.8	0.24	0.01	1472.
20	6.10	32.54	20	25.62	237.9	0.48	0.05	1473.
30	6.11	32.54	30	25.62	238.0	0.71	0.11	1473.
50	6.10	32.54	50	25.62	238.2	1.19	0.30	1473.
75	6.09	32.53	75	25.62	239.1	1.79	0.68	1473.
100	6.09	32.54	99	25.63	238.6	2.38	1.22	1474.
125	6.06	33.00	124	25.99	204.2	2.96	1.88	1475.
150	5.66	33.58	149	26.50	156.5	3.40	2.48	1474.
175	5.53	33.79	174	26.68	139.4	3.76	3.09	1474.
200	5.33	33.83	199	26.73	134.3	4.11	3.75	1474.
225	5.07	33.84	223	26.77	130.9	4.44	4.46	1473.
250	4.80	33.86	248	26.82	126.6	4.76	5.24	1473.
300	4.41	33.89	298	26.89	120.6	5.37	6.97	1472.
400	4.03	34.00	397	27.01	109.1	6.52	11.04	1472.
500	3.78	34.10	496	27.12	99.8	7.56	15.81	1473.
600	3.64	34.16	595	27.18	94.6	8.53	21.26	1474.
800	3.32	34.31	793	27.33	81.7	10.30	33.81	1476.
1000	2.95	34.38	990	27.42	73.6	11.85	48.04	1479.
1200	2.66	34.44	1188	27.49	67.3	13.26	63.76	1480.



OFFSHORE OCEANOGRAPHY GROUP

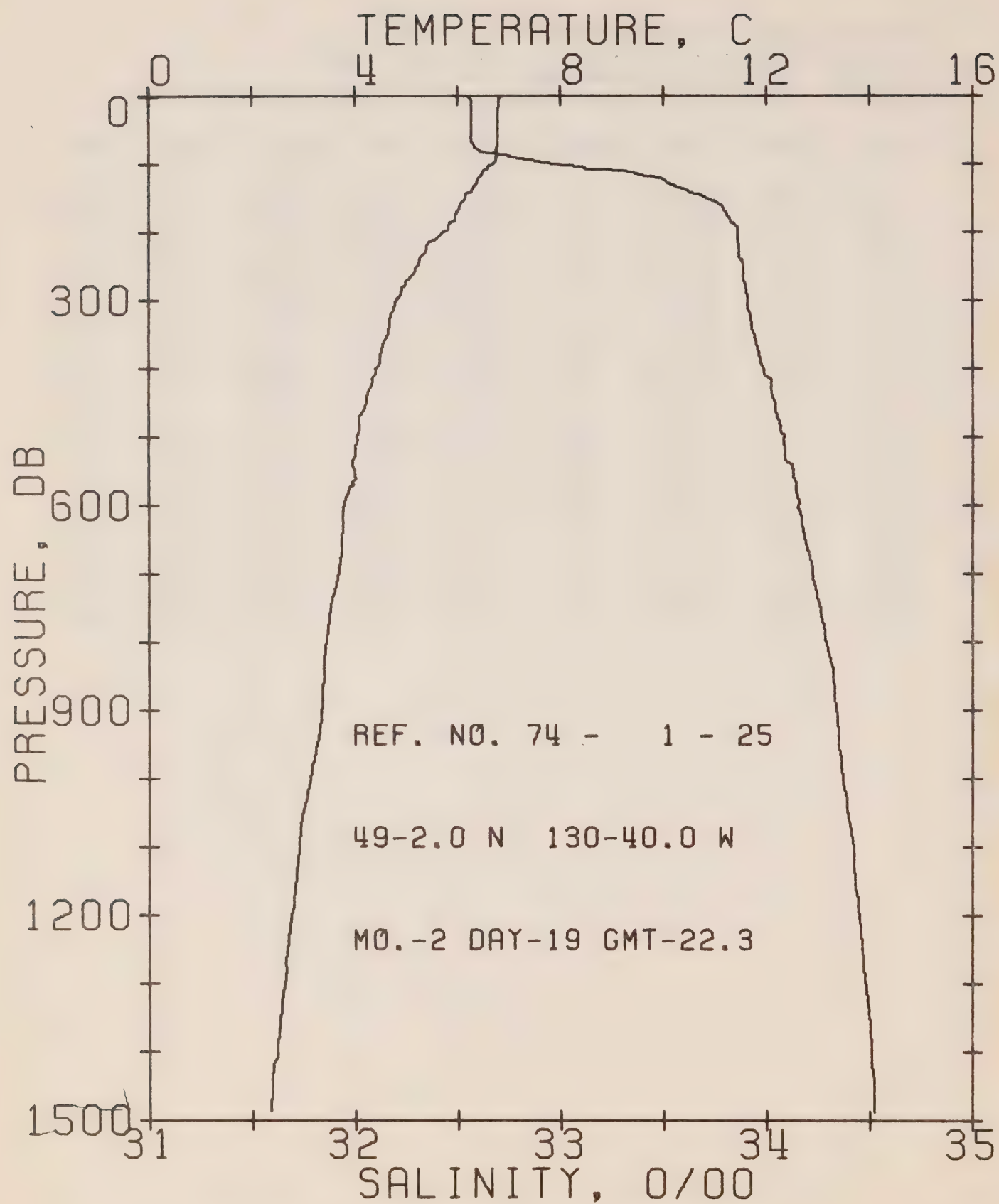
REFERENCE NO. 74- 1- 24

DATE 19/ 2/74

POSITION 49-10.0N, 132-40.0W GMT 15.0

RESULTS OF STP CAST 197 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.55	32.62	0	25.63	236.8	0.0	0.0	1474.
10	6.55	32.62	10	25.63	237.2	0.24	0.01	1474.
20	6.55	32.62	20	25.63	237.3	0.47	0.05	1474.
30	6.55	32.62	30	25.63	237.4	0.71	0.11	1475.
50	6.56	32.62	50	25.63	237.7	1.19	0.30	1475.
75	6.58	32.66	75	25.66	235.1	1.78	0.68	1476.
100	6.61	33.55	99	26.35	169.6	2.26	1.11	1477.
125	6.71	33.74	124	26.49	156.9	2.67	1.57	1478.
150	6.65	33.86	149	26.59	148.0	3.05	2.11	1479.
175	6.53	33.89	174	26.63	144.4	3.42	2.71	1479.
200	6.39	33.90	199	26.66	142.0	3.77	3.40	1478.
225	6.23	33.91	223	26.69	139.7	4.13	4.16	1473.
250	6.00	33.92	248	26.72	136.3	4.47	5.00	1478.
300	5.54	33.91	298	26.77	132.0	5.14	6.88	1477.
400	5.11	33.97	397	26.87	123.5	6.42	11.40	1477.
500	4.62	34.03	496	26.97	114.3	7.60	16.84	1476.
600	4.08	34.12	595	27.10	102.4	8.68	22.87	1476.
800	3.61	34.28	793	27.27	87.3	10.57	36.29	1477.
1000	3.12	34.36	990	27.38	77.2	12.20	51.23	1479.
1200	2.80	34.43	1188	27.47	69.3	13.66	67.54	1481.



OFFSHORE OCEANOGRAPHY GROUP

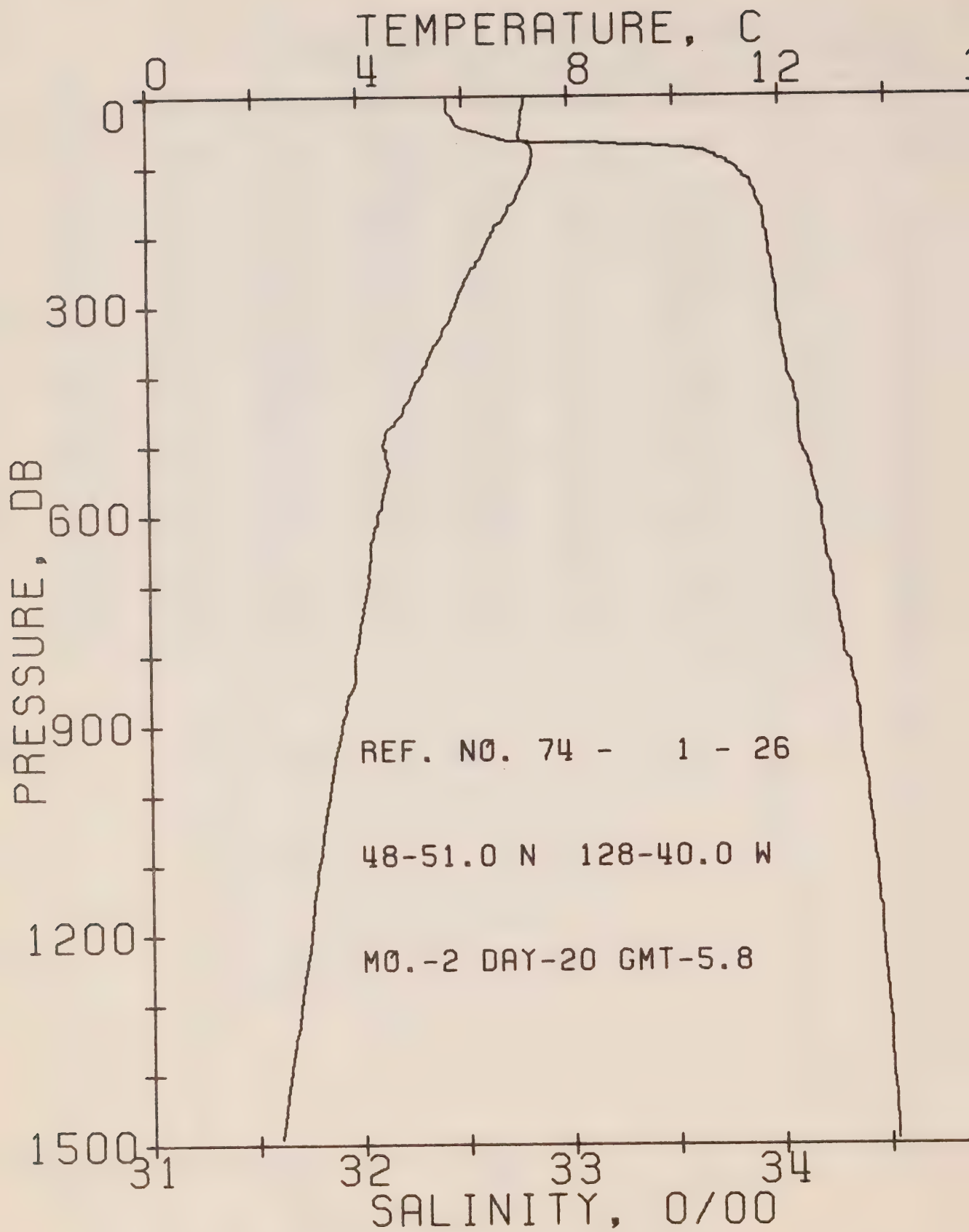
REFERENCE NO. 74- 1- 25

DATE 19/ 2/74

POSITION 49- 2.0N. 130-40.0W GMT 22.3

RESULTS OF STP CAST 205 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.88	32.55	0	25.53	246.1	0.0	0.0	1475.
10	6.81	32.57	10	25.56	244.1	0.24	0.01	1475.
20	6.77	32.57	20	25.56	243.7	0.49	0.05	1475.
30	6.77	32.57	30	25.56	243.9	0.73	0.11	1475.
50	6.77	32.57	50	25.56	244.1	1.22	0.31	1476.
75	6.76	32.58	75	25.57	243.5	1.83	0.70	1476.
100	6.68	32.95	99	25.88	215.0	2.41	1.21	1477.
125	6.37	33.51	124	26.36	169.6	2.88	1.75	1477.
150	6.13	33.71	149	26.54	152.3	3.28	2.31	1476.
175	5.95	33.81	174	26.64	143.0	3.65	2.92	1476.
200	5.71	33.86	199	26.71	136.6	3.99	3.58	1476.
225	5.38	33.87	223	26.76	132.3	4.33	4.31	1475.
250	5.21	33.89	248	26.80	129.1	4.66	5.10	1474.
300	4.80	33.91	298	26.86	123.4	5.29	6.87	1474.
400	4.41	33.98	397	26.96	114.8	6.48	11.13	1474.
500	4.03	34.09	496	27.08	103.6	7.57	16.11	1474.
600	3.79	34.16	595	27.16	96.5	8.58	21.74	1475.
800	3.44	34.29	793	27.30	84.5	10.39	34.66	1477.
1000	3.14	34.37	990	27.39	76.6	12.00	49.37	1479.
1200	2.75	34.45	1188	27.49	67.5	13.43	65.38	1480.



OFFSHORE OCEANOGRAPHY GROUP

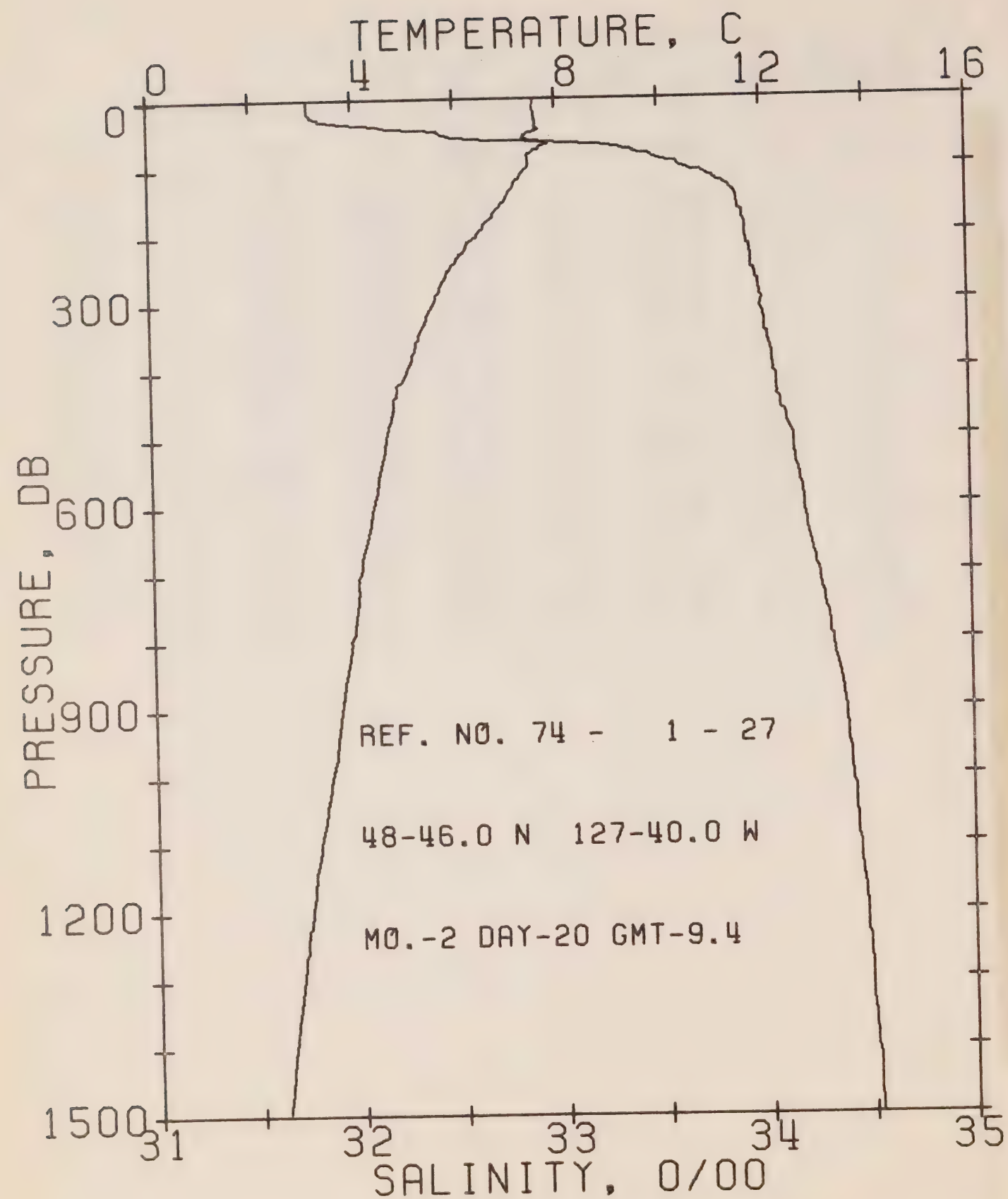
REFERENCE NO. 74- 1- 26

DATE 20/ 2/74

POSITION 48-51.0N. 128-40.0W GMT 5.8

RESULTS OF STP CAST 185 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.17	32.43	0	25.40	258.8	0.0	0.0	1476.
10	7.16	32.43	10	25.40	259.0	0.26	0.01	1476.
20	7.13	32.43	20	25.40	258.7	0.52	0.05	1477.
30	7.11	32.45	30	25.42	257.1	0.78	0.12	1477.
50	7.07	32.57	50	25.52	247.9	1.28	0.33	1477.
75	7.33	33.59	75	26.29	175.7	1.84	0.68	1480.
100	7.28	33.79	99	26.45	160.4	2.26	1.05	1480.
125	7.12	33.87	124	26.53	153.0	2.65	1.50	1480.
150	6.96	33.90	149	26.58	149.1	3.03	2.03	1480.
175	6.77	33.92	174	26.63	144.8	3.40	2.63	1480.
200	6.54	33.94	199	26.67	141.0	3.75	3.31	1479.
225	6.36	33.95	223	26.70	138.3	4.10	4.07	1479.
250	6.12	33.96	248	26.74	134.6	4.44	4.90	1478.
300	5.83	33.98	298	26.79	130.4	5.10	6.74	1478.
400	5.17	34.03	397	26.91	119.5	6.35	11.19	1477.
500	4.44	34.09	496	27.04	107.8	7.48	16.35	1476.
600	4.33	34.19	595	27.13	100.0	8.52	22.19	1477.
800	3.87	34.30	793	27.26	88.7	10.41	35.66	1478.
1000	3.35	34.40	990	27.40	76.6	12.05	50.64	1480.
1200	2.97	34.46	1188	27.49	68.8	13.50	66.84	1481.



OFFSHORE OCEANOGRAPHY GROUP

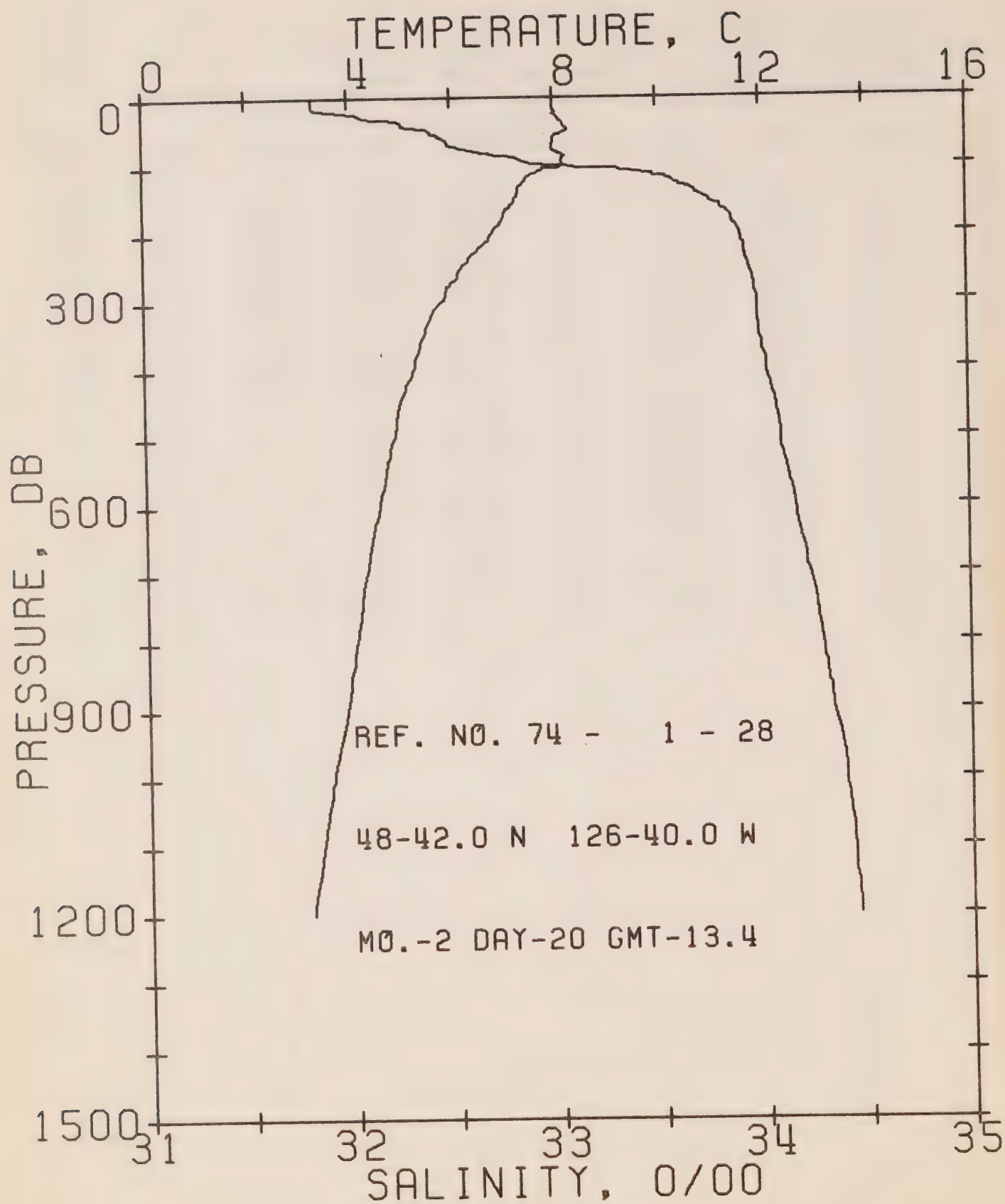
REFERENCE NO. 74- 1- 27

DATE 20/ 2/74

POSITION 48-46.0N, 127-40.0W GMT 9.4

RESULTS OF STP CAST 255 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.56	31.79	0	24.84	311.6	0.0	0.0	1477.
10	7.55	31.79	10	24.84	311.9	0.31	0.02	1477.
20	7.59	31.79	20	24.84	312.5	0.62	0.06	1477.
30	7.61	31.84	30	24.88	309.2	0.93	0.14	1478.
50	7.52	32.42	50	25.34	265.0	1.51	0.38	1479.
75	7.65	33.34	75	26.05	198.6	2.10	0.74	1431.
100	7.46	33.60	99	26.28	177.1	2.56	1.16	1481.
125	7.18	33.81	124	26.48	157.8	2.98	1.63	1480.
150	6.99	33.88	149	26.56	150.6	3.36	2.17	1480.
175	6.74	33.91	174	26.62	145.5	3.73	2.78	1479.
200	6.44	33.92	199	26.67	141.2	4.09	3.47	1479.
225	6.17	33.94	223	26.72	136.6	4.43	4.22	1478.
250	5.89	33.95	248	26.76	132.7	4.77	5.03	1477.
300	5.55	34.00	298	26.84	125.5	5.41	6.83	1477.
400	5.01	34.05	397	26.95	116.4	6.63	11.16	1476.
500	4.60	34.14	496	27.06	105.9	7.74	16.26	1476.
600	4.32	34.19	595	27.13	99.9	8.77	22.04	1477.
800	3.86	34.32	793	27.28	86.7	10.64	35.32	1478.
1000	3.42	34.41	990	27.40	76.7	12.27	50.18	1480.
1200	2.97	34.47	1198	27.49	68.5	13.72	66.44	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 74- 1- 28

DATE 20/ 2/74

POSITION 48-42.0N, 126-40.0W GMT 13.4

RESULTS OF STP CAST 240 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.01	31.83	0	24.81	314.7	0.0	0.0	1479.
10	7.99	31.83	10	24.81	314.8	0.31	0.02	1479.
20	8.04	31.93	20	24.89	308.1	0.63	0.06	1479.
30	8.10	32.08	30	24.99	297.9	0.93	0.14	1480.
50	8.24	32.40	50	25.22	276.4	1.50	0.37	1481.
75	7.98	32.55	75	25.38	261.9	2.17	0.80	1481.
100	8.18	33.01	99	25.71	230.6	2.79	1.35	1483.
125	7.39	33.59	124	26.28	177.3	3.28	1.91	1481.
150	7.23	33.75	149	26.43	163.5	3.70	2.50	1481.
175	7.00	33.86	174	26.54	153.0	4.10	3.15	1480.
200	6.78	33.90	199	26.61	147.3	4.47	3.87	1480.
225	6.49	33.92	223	26.66	142.2	4.83	4.65	1479.
250	6.17	33.94	248	26.72	136.9	5.18	5.50	1478.
300	5.81	33.98	298	26.80	130.0	5.85	7.36	1478.
400	5.21	34.02	397	26.90	121.0	7.10	11.82	1477.
500	4.82	34.09	496	27.00	112.2	8.26	17.12	1477.
600	4.53	34.16	595	27.08	104.9	9.34	23.21	1478.
800	4.05	34.28	793	27.23	91.9	11.30	37.13	1479.
1000	3.56	34.39	991	27.37	79.7	13.02	52.83	1481.
1200	3.16	34.45	1188	27.46	72.1	14.52	69.73	1482.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 74- 1- 29

DATE 20/ 2/74

POSITION 48-38.0N, 126- 0.0W GMT 16.2

RESULTS OF STD CAST 60 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.52	28.76	0	22.48	537.7	0.0	0.0	1473.
10	7.59	28.76	10	22.47	538.8	0.54	0.03	1473.
20	7.62	31.10	20	24.29	364.4	0.95	0.09	1477.
30	7.63	31.44	30	24.56	339.3	1.31	0.18	1477.
50	7.94	32.20	50	25.11	286.8	1.92	0.43	1480.
75	7.88	32.79	75	25.58	242.7	2.60	0.86	1481.
100	7.50	33.35	99	26.08	196.2	3.14	1.33	1480.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	7.52	28.76	46.	8.04	32.13
6.	7.53	28.76	48.	7.93	32.19
9.	7.56	28.76	51.	7.94	32.21
10.	7.59	28.76	54.	7.95	32.26
12.	7.59	30.00	56.	7.96	32.29
13.	7.60	30.40	57.	7.96	32.30
15.	7.65	30.47	59.	7.95	32.36
16.	7.65	30.72	62.	7.95	32.38
17.	7.65	30.96	65.	7.98	32.46
19.	7.63	31.07	68.	7.98	32.53
19.	7.62	31.08	69.	7.97	32.54
22.	7.62	31.14	70.	7.95	32.55
23.	7.61	31.20	72.	7.94	32.64
25.	7.61	31.23	74.	7.91	32.71
28.	7.61	31.27	76.	7.85	32.87
29.	7.61	31.30	77.	7.83	32.89
30.	7.63	31.44	80.	7.77	32.99
31.	7.69	31.51	80.	7.76	32.99
32.	7.71	31.64	81.	7.75	32.99
33.	7.76	31.69	83.	7.72	33.06
35.	7.78	31.75	85.	7.68	33.06
36.	7.79	31.76	87.	7.65	33.16
37.	7.81	31.81	89.	7.63	33.20
38.	7.81	31.85	91.	7.58	33.23
40.	7.82	31.88	91.	7.57	33.23
41.	7.84	31.89	95.	7.53	33.28
42.	7.93	31.94	96.	7.52	33.32
43.	7.95	31.97	98.	7.51	33.34
44.	7.96	32.03	100.	7.50	33.35
46.	8.02	32.07	101.	7.50	33.35

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 74- 1- 30

DATE 20/ 2/74

POSITION 48-33.0N, 125-32.0W GMT 18.2

RESULTS OF STP CAST 62 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	7.38	30.43	0	23.80	410.9	0.0	0.0	1475.
10	7.38	30.43	10	23.80	411.3	0.41	0.02	1475.
20	7.51	30.49	20	23.83	408.6	0.82	0.03	1475.
30	7.68	31.08	30	24.27	366.8	1.21	0.18	1477.
50	8.02	32.56	50	25.38	261.4	1.81	0.42	1481.
75	7.77	33.10	75	25.84	218.2	2.40	0.80	1481.
100	7.60	33.22	99	25.96	207.3	2.93	1.27	1481.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	7.38	30.43	50.	8.02	32.56
8.	7.38	30.43	52.	8.02	32.60
11.	7.38	30.43	54.	8.02	32.67
13.	7.38	30.43	55.	8.01	32.71
15.	7.39	30.44	57.	8.01	32.80
18.	7.39	30.45	59.	8.01	32.82
19.	7.42	30.46	60.	8.00	32.85
19.	7.44	30.47	62.	8.00	32.87
20.	7.51	30.49	65.	7.99	32.90
21.	7.58	30.62	66.	7.94	32.91
22.	7.67	30.66	67.	7.87	32.93
24.	7.71	30.75	68.	7.83	32.96
26.	7.71	30.81	69.	7.83	33.04
28.	7.69	30.86	70.	7.82	33.08
29.	7.68	30.95	72.	7.80	33.08
30.	7.68	31.08	73.	7.78	33.08
32.	7.72	31.26	76.	7.77	33.11
33.	7.74	31.48	79.	7.75	33.12
34.	7.78	31.65	79.	7.74	33.13
35.	7.81	31.77	80.	7.73	33.13
36.	7.81	31.86	81.	7.73	33.13
36.	7.81	32.00	83.	7.73	33.14
37.	7.82	32.05	86.	7.70	33.14
39.	7.83	32.05	87.	7.70	33.14
39.	7.84	32.09	88.	7.70	33.15
40.	7.84	32.11	89.	7.66	33.15
42.	7.92	32.13	90.	7.64	33.17
43.	8.00	32.14	92.	7.62	33.21
43.	8.00	32.28	95.	7.61	33.22
45.	8.01	32.49	100.	7.60	33.22
48.	8.02	32.53	101.	7.60	33.22

SURFACE TEMPERATURE AND SALINITY OBSERVATIONS

(P-74-1)

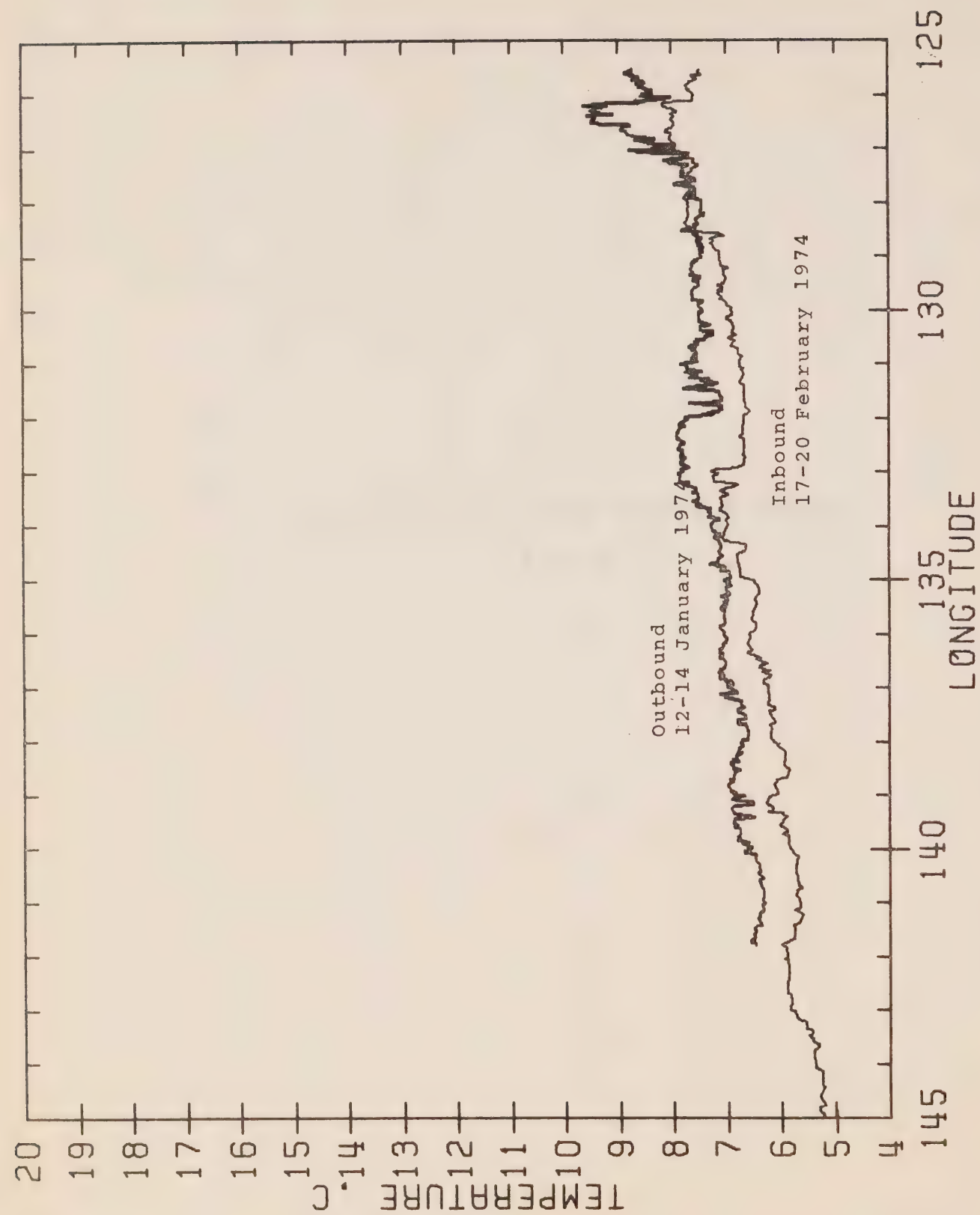


Figure 7 Surface temperature along Line P recorded from engine room intake. P-74-1

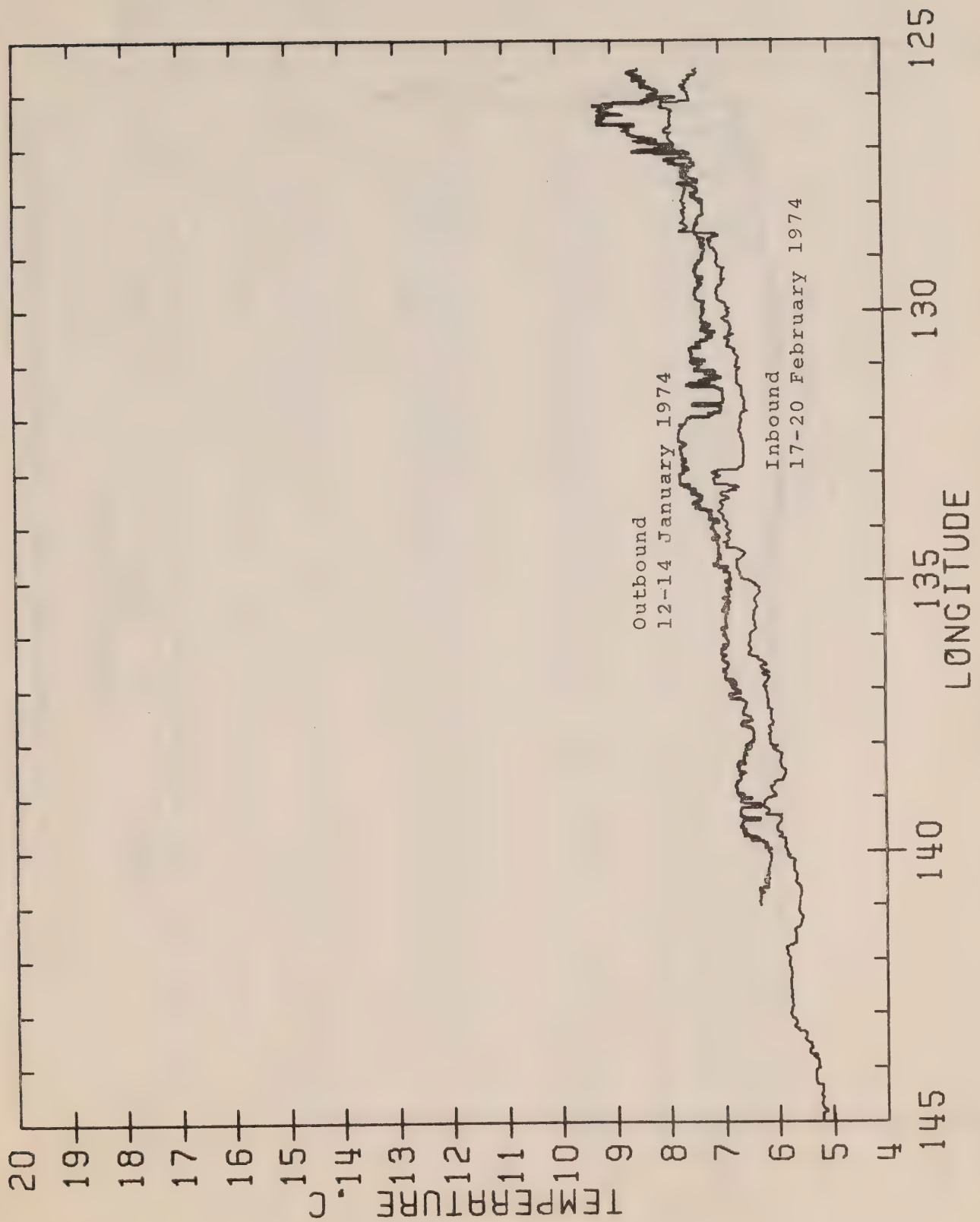


Figure 8 Surface temperature along Line P recorded from thermosalinograph. P-74-1

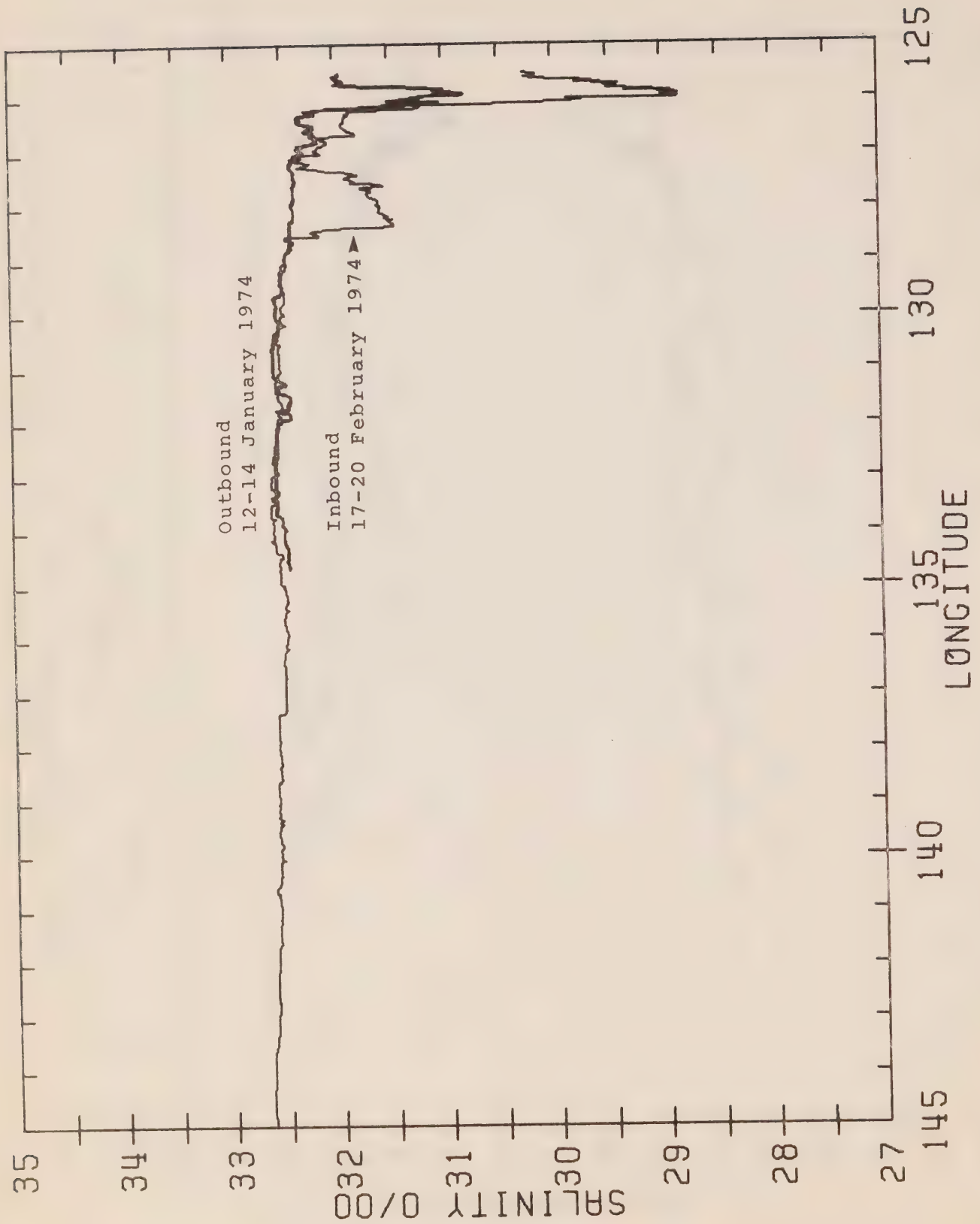


Figure 9 Surface salinity along Line P recorded from thermosalinograph.
P-74-1

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 74- 1

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
74	1	12	505	31.956	8.6	125-33
74	1	12	633	31.226	8.3	126- 0
74	1	12	842	32.169	8.7	126-40
74	1	12	1221	32.380	7.8	127-40
74	1	12	1505	32.385	7.5	128-40
74	1	12	1757	32.389	7.7	129-40
74	1	12	2103	32.593	7.5	130-40
74	1	13	100	32.444	7.1	131-40
74	1	13	400	32.586	7.9	132-40
74	1	13	730	32.572	7.5	133-40
74	1	13	1023	32.474	7.2	134-40
74	1	13	1400	32.489	7.0	135-40
74	1	13	1713	32.518	7.2	136-40
74	1	13	2020	32.507	6.8	137-40
74	1	13	2303	32.595	6.8	138-40
74	1	14	300	32.600	6.5	139-40
74	1	15	0	32.610	5.7	145- 0
74	1	16	0	32.634	5.7	ON STATION
74	1	17	0	32.640	5.5	ON STATION
74	1	18	0	32.626	5.5	ON STATION
74	1	19	0	32.641	5.4	ON STATION
74	1	20	0	32.657	5.6	ON STATION
74	1	21	0	32.659	5.5	ON STATION
74	1	22	0	32.657	5.5	ON STATION
74	1	23	0	32.645	5.6	ON STATION
74	1	24	0	32.665	5.5	ON STATION
74	1	25	0	32.690	5.3	ON STATION
74	1	26	0	32.657	5.5	ON STATION
74	1	27	0	32.658	5.6	ON STATION
74	1	28	0	32.673	5.5	ON STATION
74	1	29	0	32.679	5.4	ON STATION
74	1	30	0	32.646	5.4	ON STATION
74	1	31	1800	32.657	5.4	ON STATION
74	1	31	1900	32.665	5.3	ON STATION
74	1	31	2000	32.672	5.3	ON STATION
74	1	31	2100	32.654	5.5	ON STATION
74	1	31	2200	32.669	5.3	ON STATION
74	1	31	2300	32.656	5.4	ON STATION
74	2	1	0	32.671	5.5	ON STATION
74	2	1	100	32.661	5.3	ON STATION
74	2	1	200	32.650	5.4	ON STATION
74	2	1	300	32.644	5.4	ON STATION
74	2	1	400	32.645	5.4	ON STATION
74	2	1	500	32.640	5.4	ON STATION
74	2	1	600	32.647	5.5	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 74- 1

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
74	2	1	600	32.647	5.5	ON STATION
74	2	1	700	32.644	5.4	ON STATION
74	2	1	800	32.649	5.3	ON STATION
74	2	1	900	32.646	5.4	ON STATION
74	2	1	1000	32.659	5.3	ON STATION
74	2	1	1100	32.658	5.3	ON STATION
74	2	1	1200	32.669	5.4	ON STATION
74	2	1	1300	32.671	5.3	ON STATION
74	2	1	1400	32.643	5.4	ON STATION
74	2	1	1500	32.643	5.5	ON STATION
74	2	1	1600	32.650	5.3	ON STATION
74	2	1	1700	32.642	5.4	ON STATION
74	2	2	0	32.661	5.5	ON STATION
74	2	3	0	32.654	5.5	ON STATION
74	2	4	0	32.658	5.3	ON STATION
74	2	5	0		5.5	ON STATION
74	2	6	0	32.654	5.6	ON STATION
74	2	7	0	32.644	5.4	ON STATION
74	2	8	0	32.661	5.3	ON STATION
74	2	9	0	32.672	5.3	ON STATION
74	2	10	0	32.653	5.3	ON STATION
74	2	11	0	32.661	5.3	ON STATION
74	2	12	0	32.668	5.2	ON STATION
74	2	13	0	32.661	5.2	ON STATION
74	2	14	0	32.666	5.2	ON STATION
74	2	15	0	32.672	5.1	ON STATION
74	2	16	0	32.673	5.0	ON STATION
74	2	17	0	32.682	5.0	145- 0
74	2	18	100	32.658	5.3	143-40
74	2	18	615	32.608	5.8	142-40
74	2	18	1030	32.599	5.6	141-40
74	2	18	1325	32.611	5.6	140-40
74	2	18	1700	32.591	5.9	139-40
74	2	18	2016	32.589	5.8	138-40
74	2	19	15	32.589	6.0	137-40
74	2	19	331	32.519	6.0	136-40
74	2	19	625	32.510	6.3	135-40
74	2	19	920	32.561	6.7	134-40
74	2	19	1215	32.623	6.8	133-40
74	2	19	1500	32.599	6.5	132-40
74	2	19	1927	32.562	6.5	131-40
74	2	19	2229	32.553	6.8	130-40
74	2	20	136	32.495	6.9	129-40
74	2	20	557	32.397	7.1	128-40
74	2	20	937	31.776	7.5	127-40

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 74- 1

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
74	2	20	937	31.776	7.5	127-40
74	2	20	1333	31.802	8.1	126-40
74	2	20	1620	28.747	7.5	126- 0
74	2	20	1806	30.404	7.4	125-32

OCEANOGRAPHIC DATA OBTAINED ON CRUISE P-74-2
(CODC REFERENCE NO. 15-74-002)

RESULTS OF HYDROGRAPHIC OBSERVATIONS

(P-74-2)

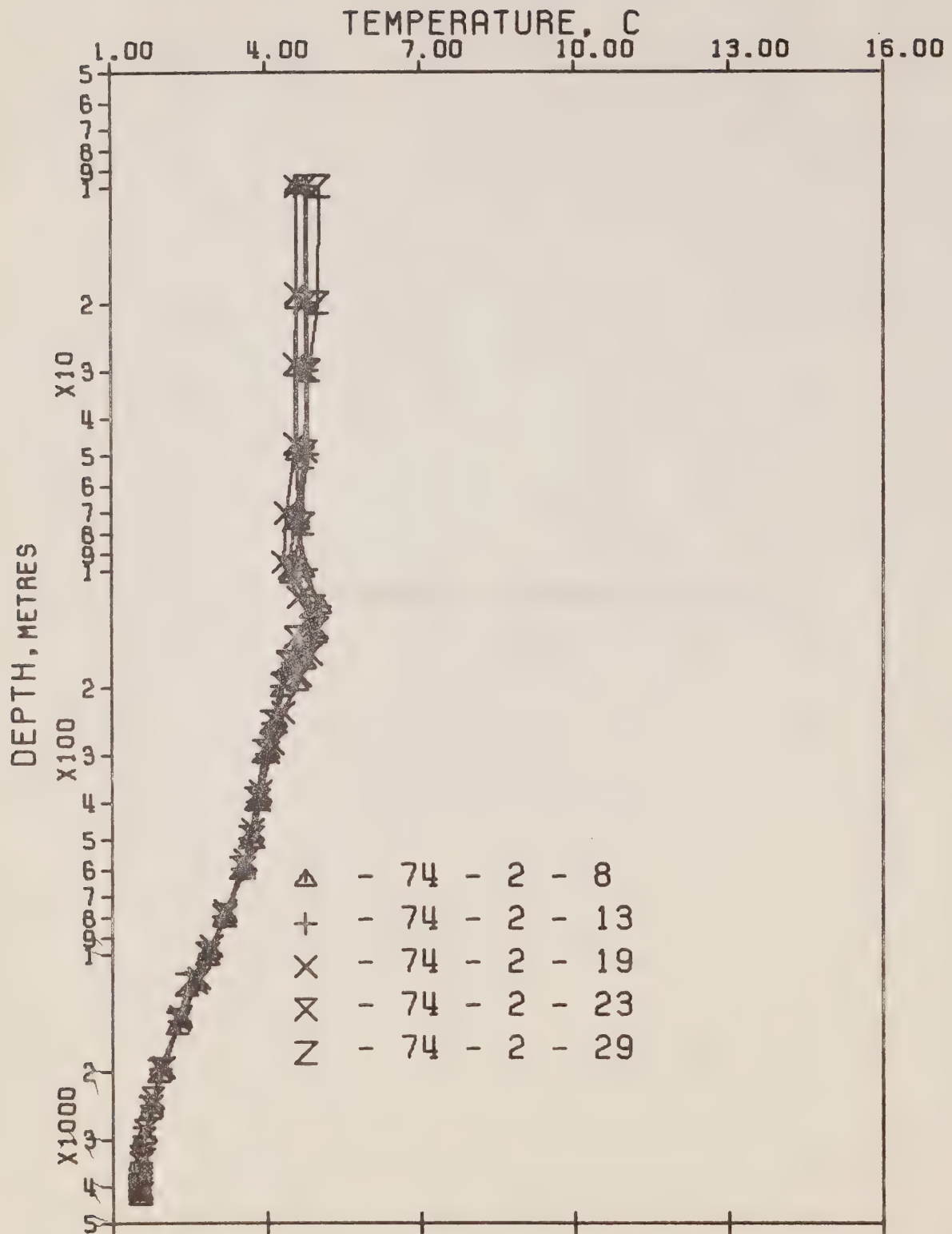


Figure 10 Composite plot of temperature vs \log_{10} depth. P-74-2

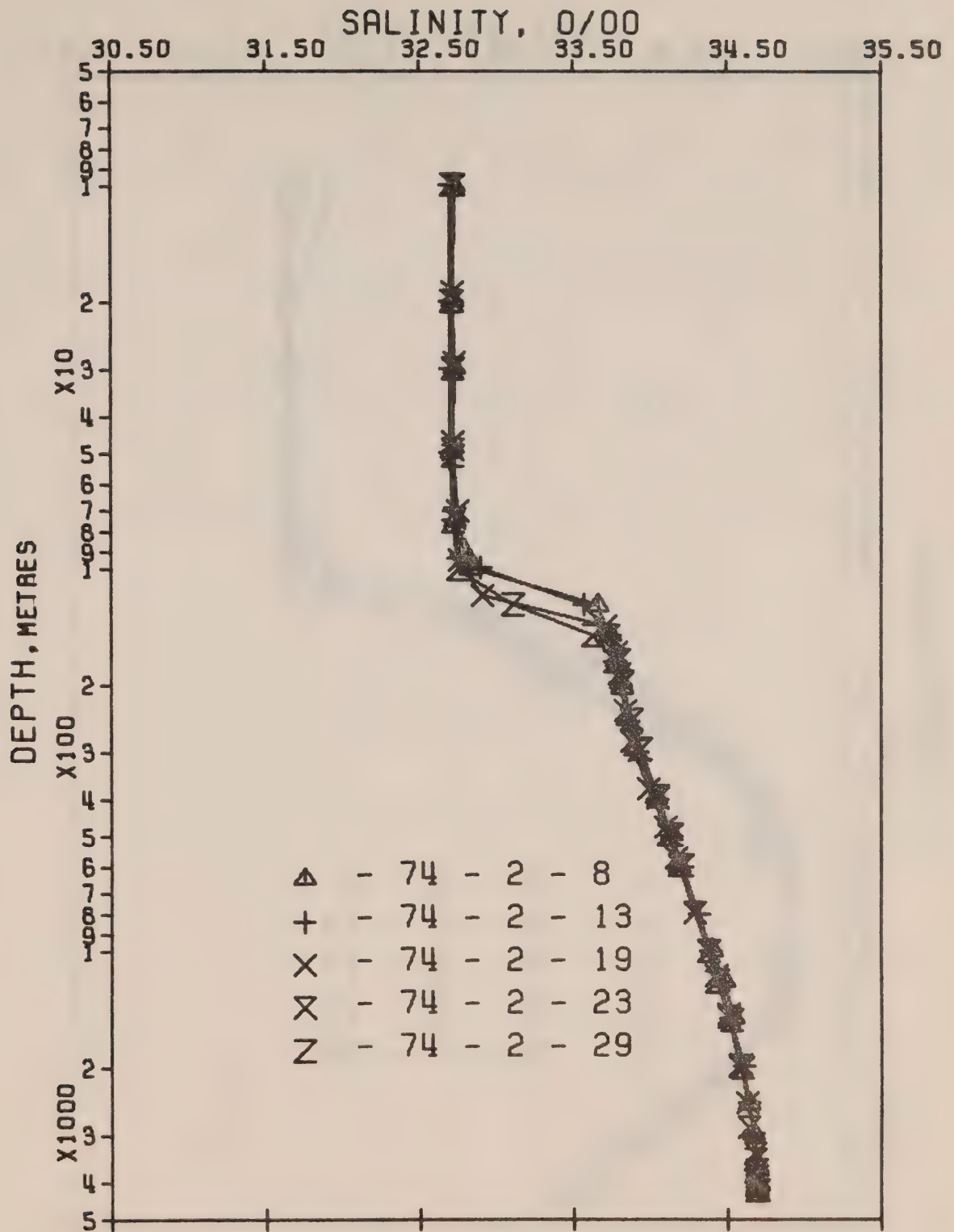


Figure 11 Composite plot of salinity vs \log_{10} depth. P-74-2

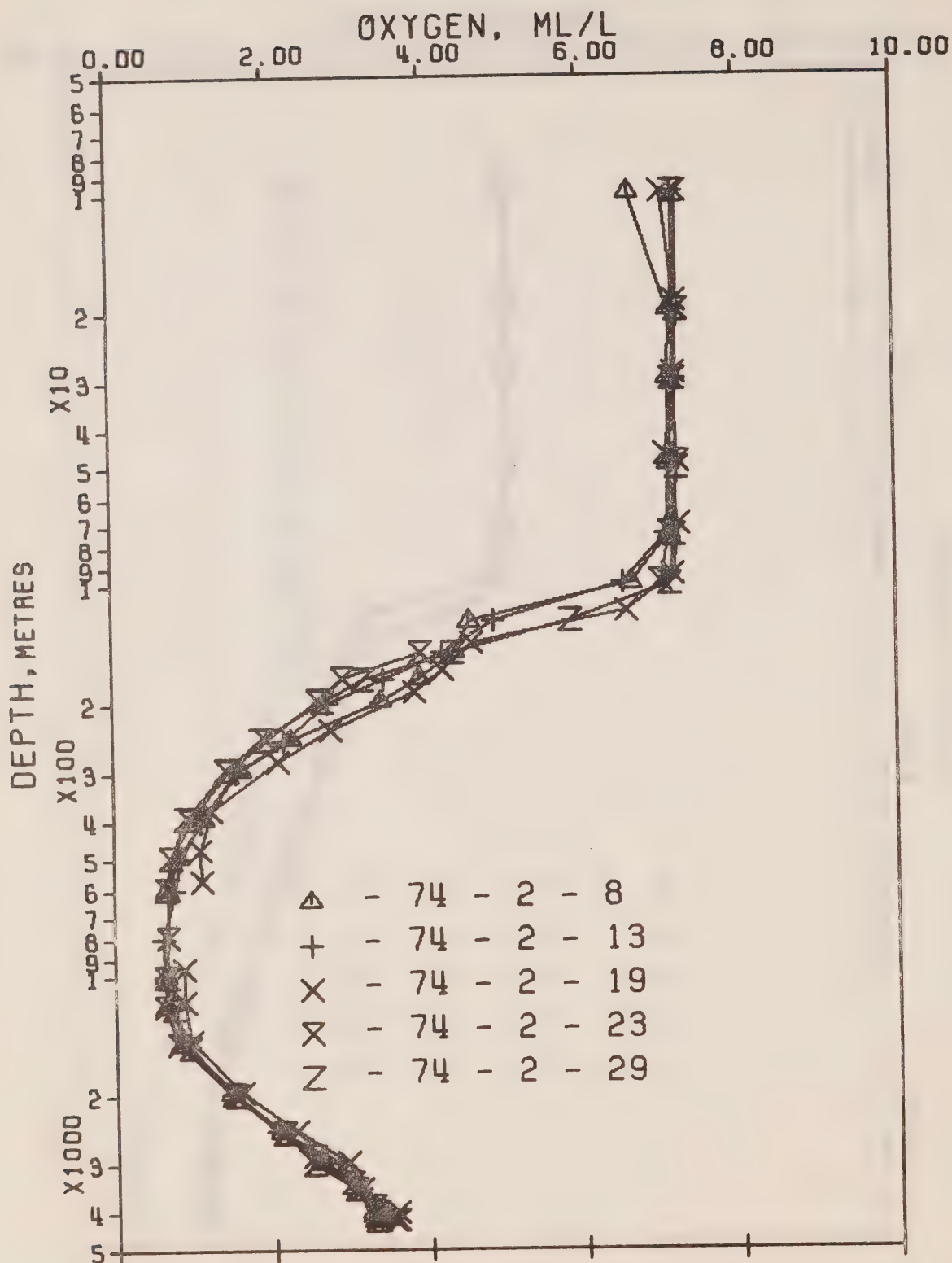
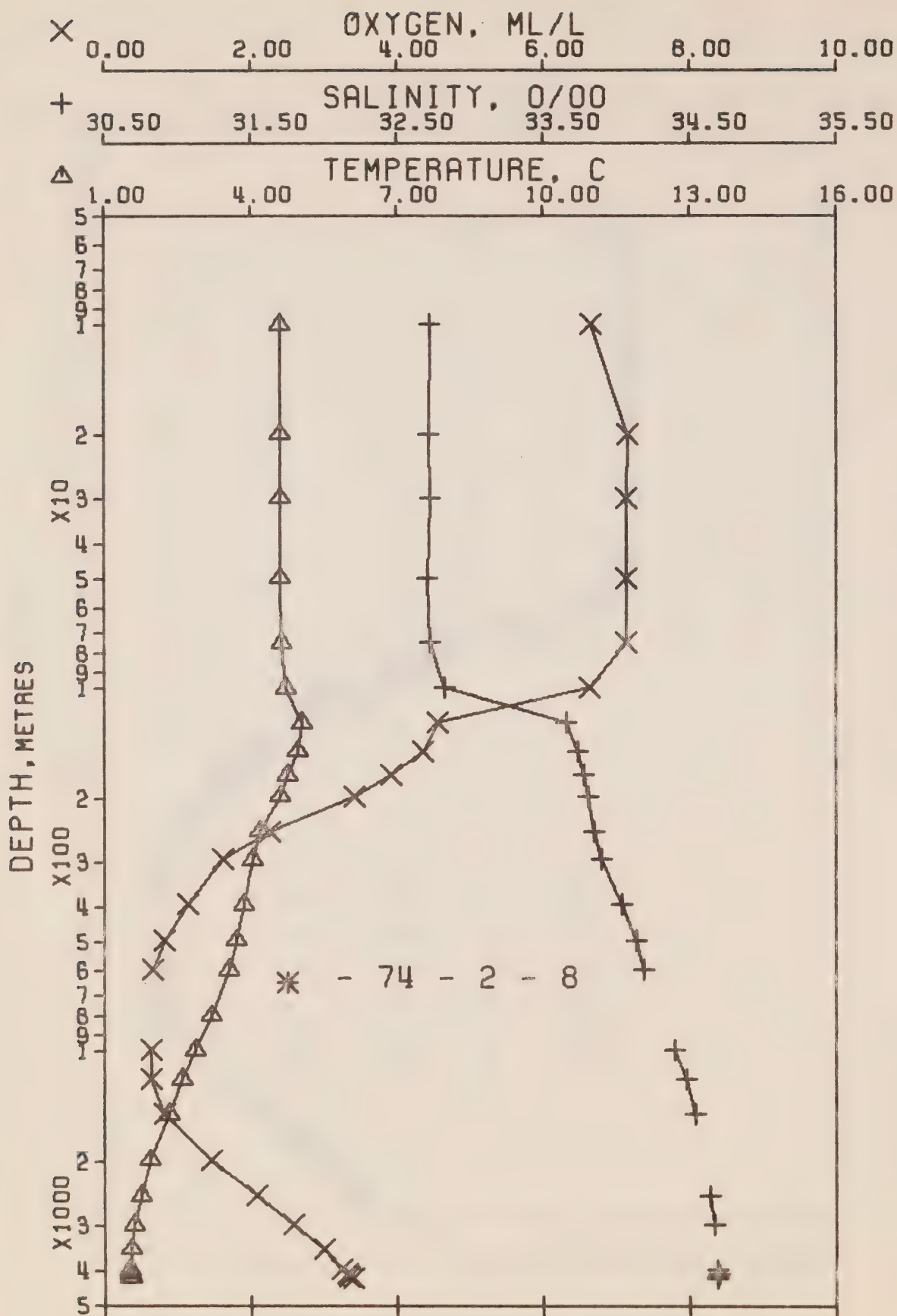


Figure 12 Composite plot of oxygen vs \log_{10} depth. P-74-2



DATE 25/ 2/74

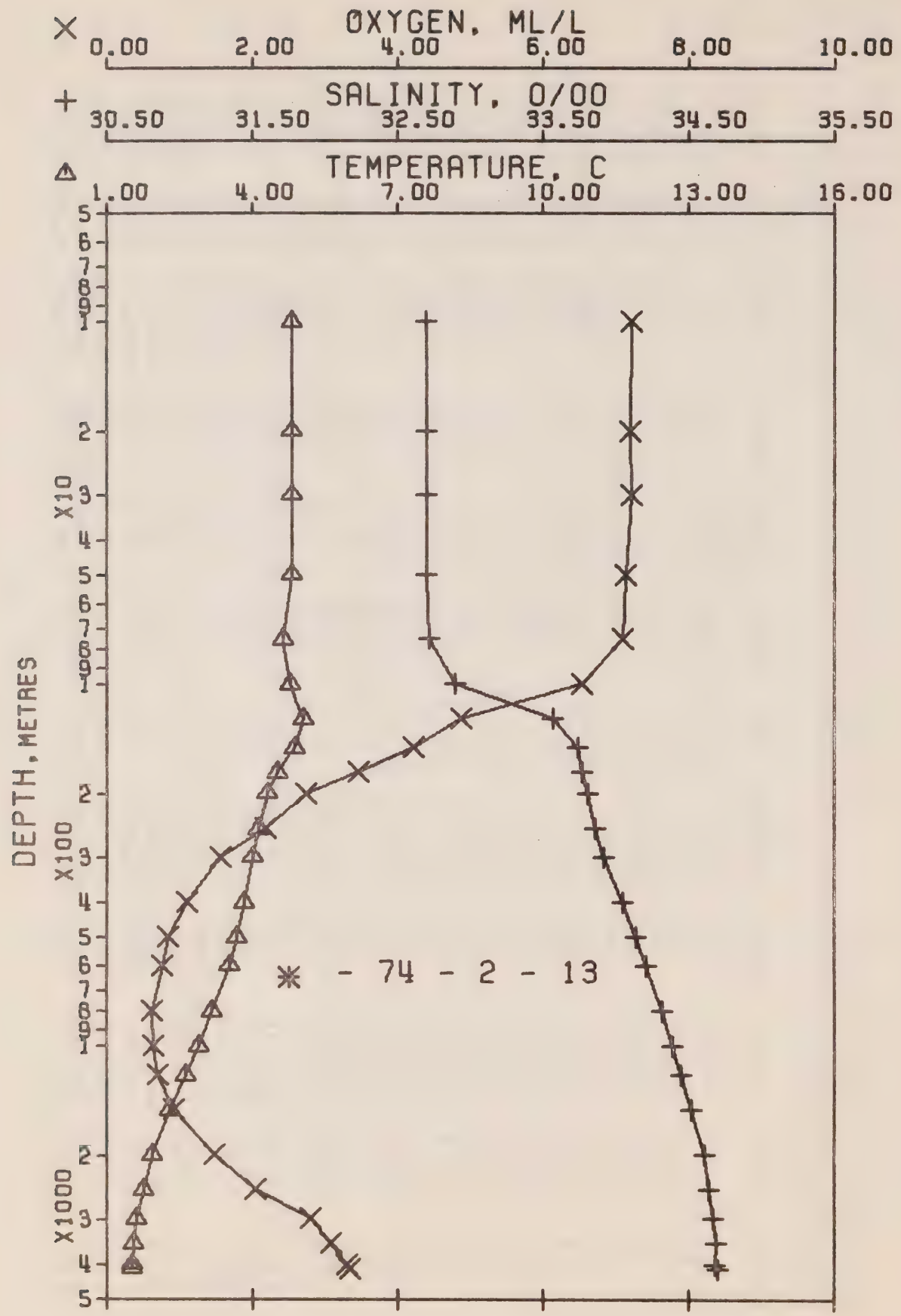
REFERENCE NO. 74- 2- 8

OFFSHORE OCEANOGRAPHY GROUP

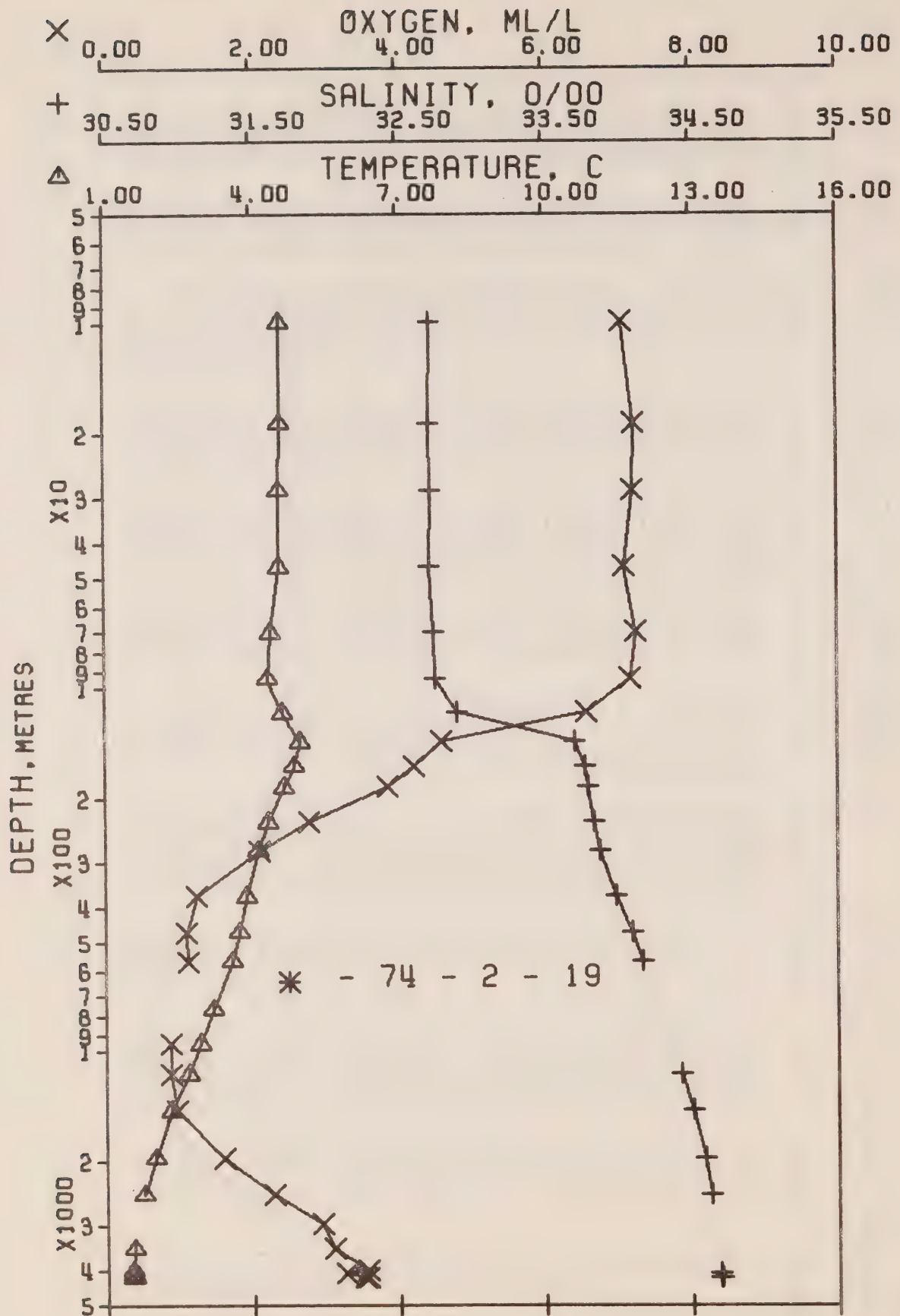
POSITION 50- 0.0 N, 145- 0.0 W GMT 9.0

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	UXY	SOUND
0	4.65	32.738	0	25.947	206.9	4.65	206.6	0.0	0.0	6.76	1467.
10	4.59	32.731	10	25.948	206.9	4.59	206.6	0.21	0.01	6.66	1469.
20	4.60	32.723	20	25.941	207.7	4.60	207.2	0.42	0.04	7.16	1467.
30	4.60	32.726	30	25.943	207.5	4.60	207.0	0.63	0.10	7.14	1467.
50	4.61	32.707	50	25.927	209.2	4.61	208.6	1.05	0.27	7.14	1467.
75	4.62	32.727	75	25.942	208.0	4.61	207.1	1.57	0.61	7.14	1468.
101	4.73	32.835	100	26.016	201.2	4.72	200.0	2.10	1.08	6.64	1459.
126	5.04	33.657	125	26.632	143.2	5.03	141.5	2.53	1.57	4.56	1471.
150	4.96	33.744	149	26.710	136.1	4.95	134.1	2.96	2.04	4.35	1472.
175	4.76	33.779	174	26.760	131.5	4.75	129.3	3.20	2.60	3.93	1471.
200	4.59	33.808	199	26.801	127.7	4.57	125.4	3.52	3.22	3.42	1471.
250	4.18	33.850	248	26.878	120.6	4.16	118.1	4.13	4.63	2.26	1470.
299	4.02	33.897	297	26.932	115.9	4.00	113.0	4.72	6.26	1.63	1470.
398	3.85	34.041	395	27.064	104.1	3.82	100.4	5.81	10.13	1.14	1471.
499	3.70	34.143	495	27.160	95.7	3.66	91.3	6.81	14.72	0.83	1473.
601	3.54	34.190	596	27.213	91.4	3.50	86.1	7.76	20.06	0.67	1474.
804	3.18	34.296*	797	27.332	81.0	3.12	74.8	9.52	32.63	0.0	1476.
1003	2.85	34.398	993	27.443	71.2	2.78	64.2	11.02	46.50	0.64	1478.
1202	2.59	34.481	1190	27.532	63.4	2.51	55.7	12.36	61.50	0.64	1480.
1504	2.31	34.536	1487	27.600	57.7	2.21	49.1	14.17	86.45	0.82	1484.
2010	1.94	34.600*	1985	27.680	50.9	1.80	41.3	16.89	135.28	1.47	1491.
2519	1.74	34.641	2485	27.729	47.2	1.56	36.4	19.38	192.69	2.08	1498.
3030	1.60	34.672	2986	27.764	44.7	1.38	32.8	21.72	258.74	2.58	1506.
3541	1.54	34.669*	3485	27.766	45.6	1.27	32.4	24.02	335.80	2.99	1515.
4050	1.52	34.686	3982	27.781	45.4	1.19	30.6	26.35	426.36	3.24	1524.
4152	1.52	34.700	4081	27.792	44.7	1.18	29.4	26.81	445.45	3.32	1525.
4243	1.53	34.692	4170	27.785	45.7	1.18	30.0	27.23	463.18	3.34	1527.
4254	1.52	34.692	4180	27.786	45.5	1.17	29.9	27.27	465.21	3.40	1527.



OFFSHORE OCEANOGRAPHY GROUP										REFERENCE NO. 74- 2- 13		DATE 4/ 3/74	
POSITION 49-50.0 N. 144-57.0 W GMT 8.8													
HYDROGRAPHIC CAST DATA													
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND		
0	4.82	32.695	0	25.895	211.8	4.82	211.6	0.0	0.0	7.21	1467.		
10	4.81	32.701	10	25.901	211.4	4.81	211.0	0.21	0.01	7.22	1467.		
20	4.82	32.701	20	25.900	211.6	4.82	211.2	0.43	0.04	7.21	1468.		
30	4.81	32.702	30	25.902	211.5	4.81	210.9	0.64	0.10	7.23	1463.		
50	4.82	32.703	50	25.901	211.6	4.82	211.0	1.05	0.27	7.13	1463.		
75	4.64	32.724	75	25.937	208.4	4.63	207.6	1.60	0.61	7.10	1463.		
101	4.77	32.899	100	26.062	196.9	4.76	195.7	2.11	1.08	6.54	1469.		
126	5.04	33.575	125	26.567	149.3	5.03	147.7	2.55	1.58	4.88	1471.		
151	4.86	33.743	150	26.720	135.1	4.85	133.1	2.90	2.08	4.22	1471.		
176	4.51	33.770	175	26.780	129.5	4.50	127.4	3.23	2.63	3.46	1470.		
201	4.31	33.810	200	26.833	124.6	4.30	122.4	3.55	3.25	2.74	1470.		
253	4.13	33.857	251	26.889	119.6	4.11	117.0	4.18	4.70	2.19	1470.		
303	3.99	33.919	301	26.953	113.9	3.97	111.0	4.77	6.37	1.57	1470.		
404	3.81	34.046	401	27.072	103.4	3.78	99.7	5.86	10.31	1.11	1471.		
505	3.67	34.141	501	27.161	95.7	3.63	91.1	6.86	14.96	0.83	1473.		
606	3.52	34.215	601	27.235	89.3	3.48	84.0	7.80	20.24	0.76	1474.		
810	3.15	34.321	803	27.354	78.9	3.09	72.6	9.51	32.58	0.62	1470.		
1012	2.88	34.392	1002	27.436	72.0	2.81	64.9	11.02	46.66	0.64	1478.		
1214	2.61	34.453	1202	27.508	65.7	2.53	57.9	12.41	62.45	0.71	1480.		
1518	2.30	34.525	1501	27.592	58.5	2.20	49.9	14.29	88.56	0.92	1484.		
2021	1.94	34.606	1996	27.685	50.4	1.80	40.8	17.00	137.42	1.48	1491.		
2527	1.74	34.644	2493	27.731	47.0	1.56	36.2	19.45	194.28	2.05	1499.		
3039	1.59	34.675	2995	27.767	44.4	1.36	32.5	21.78	260.41	2.79	1507.		
3557	1.54	34.688	3501	27.781	44.3	1.26	30.8	24.06	337.18	3.07	1515.		
4075	1.52	34.682	4006	27.778	45.7	1.19	30.8	26.42	429.10	3.30	1524.		
4178	1.52	34.700	4106	27.792	44.7	1.13	29.4	26.89	448.64	3.35	1526.		



DATE 17/ 3/74

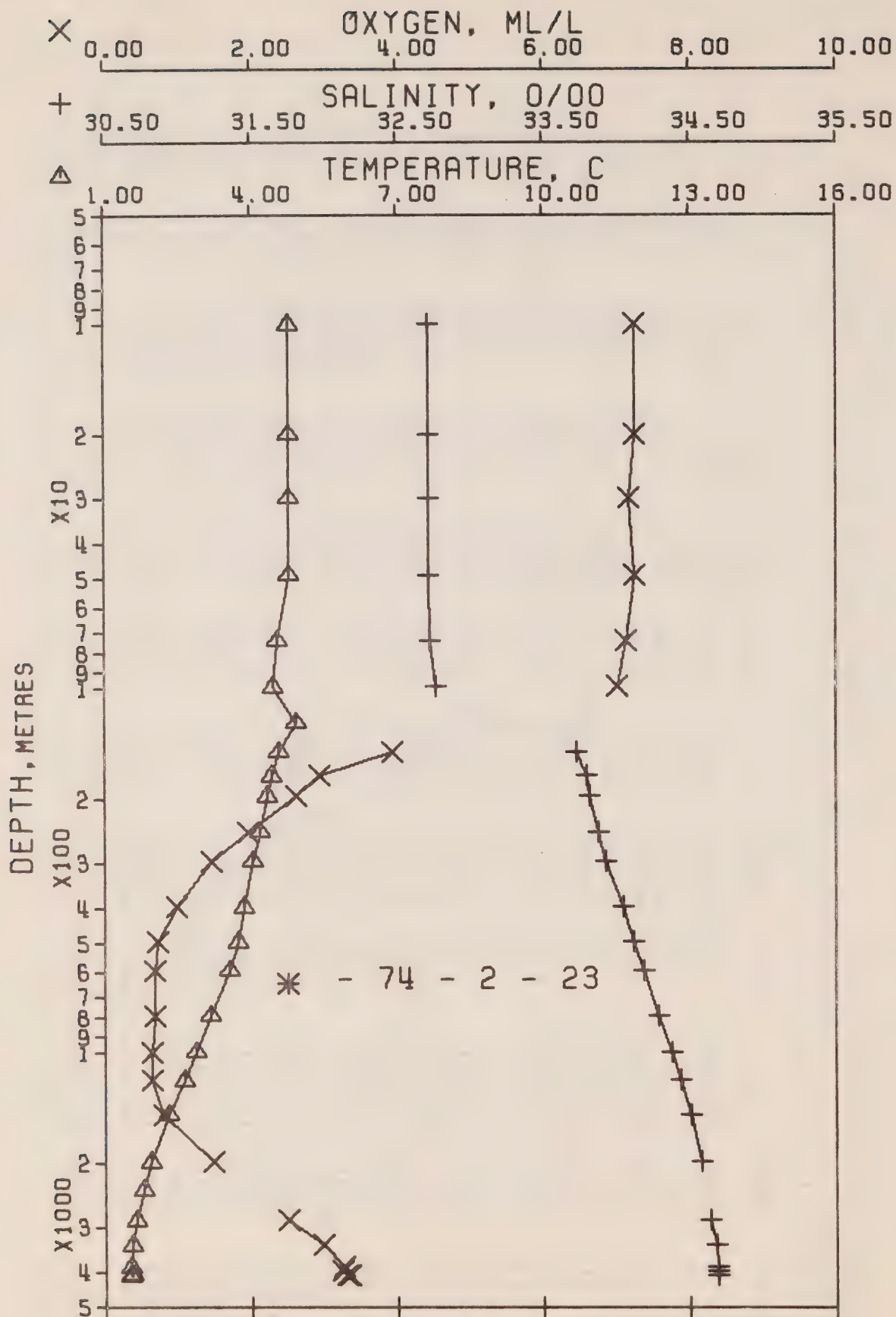
REFERENCE NO. 74- 2- 19

OFFSHORE OCEANOGRAPHY GROUP

POSITION 50- 0.0 N. 145- 0.0 W GMT 8.8

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	4.60	32.720	0	25.938	207.7	4.60	207.5	0.0	0.0	7.32	1465.
10	4.60	32.727	10	25.944	207.2	4.60	206.9	0.21	0.01	7.07	1466.
19	4.59	32.722	19	25.941	207.6	4.59	207.2	0.40	0.04	7.24	1467.
29	4.58	32.728	29	25.947	207.1	4.58	206.6	0.61	0.09	7.22	1467.
47	4.57	32.723	47	25.944	207.5	4.57	206.9	0.98	0.24	7.10	1467.
71	4.38	32.746	71	25.982	204.1	4.37	203.3	1.48	0.54	7.25	1457.
96	4.32	32.758	95	25.998	202.8	4.31	201.8	1.97	0.96	7.19	1457.
119	4.64	32.915	118	26.089	194.5	4.63	193.1	2.44	1.47	6.58	1469.
143	4.99	33.707	142	26.677	139.1	4.98	137.2	2.84	2.00	4.60	1472.
166	4.87	33.777	165	26.746	132.7	4.86	130.7	3.15	2.49	4.21	1472.
190	4.66	33.801	189	26.788	128.9	4.65	126.6	3.47	3.06	3.86	1471.
237	4.32	33.838	235	26.854	122.9	4.30	120.4	4.05	4.33	2.78	1470.
284	4.12	33.884	282	26.912	117.8	4.10	114.9	4.62	5.85	2.11	1470.
379	3.88	33.993	376	27.023	107.9	3.85	104.3	5.69	9.46	1.25	1471.
475	3.74	34.096	471	27.119	99.5	3.71	95.2	6.68	13.78	1.09	1472.
573	3.57	34.171	568	27.195	92.9	3.53	87.8	7.62	18.81	1.12	1473.
775	3.20	34.289*	768	27.324	81.6	3.15	75.5	9.38	30.86	0.0	1475.
965	2.91	34.368*	956	27.414	73.8	2.84	67.0	10.85	43.93	0.88	1477.
1169	2.68	34.432	1157	27.485	67.8	2.60	60.1	12.29	59.57	0.89	1480.
1475	2.33	34.511	1459	27.578	59.6	2.23	51.1	14.23	85.73	0.95	1483.
1989	1.98	34.587	1965	27.667	52.3	1.84	42.5	17.07	135.99	1.61	1490.
2507	1.75	34.635	2473	27.723	47.8	1.57	37.0	19.63	194.58	2.27	1498.
3025	1.75	34.643*	2981	27.729	48.9	1.52	36.1	22.13	265.22	2.93	1507.
3543	1.53	34.645*	3487	27.747	47.1	1.26	34.1	24.62	348.48	3.11	1515.
4059	1.52	34.673*	3991	27.771	46.4	1.19	31.6	27.05	442.49	3.56	1524.
4162	1.52	34.686	4091	27.781	45.7	1.18	30.5	27.52	462.30	3.26	1526.
4254	1.54	34.704	4181	27.794	45.0	1.19	29.1	27.93	480.08	3.55	1527.
4265	1.52	34.694	4191	27.787	45.4	1.17	29.7	27.98	482.09	3.51	1527.

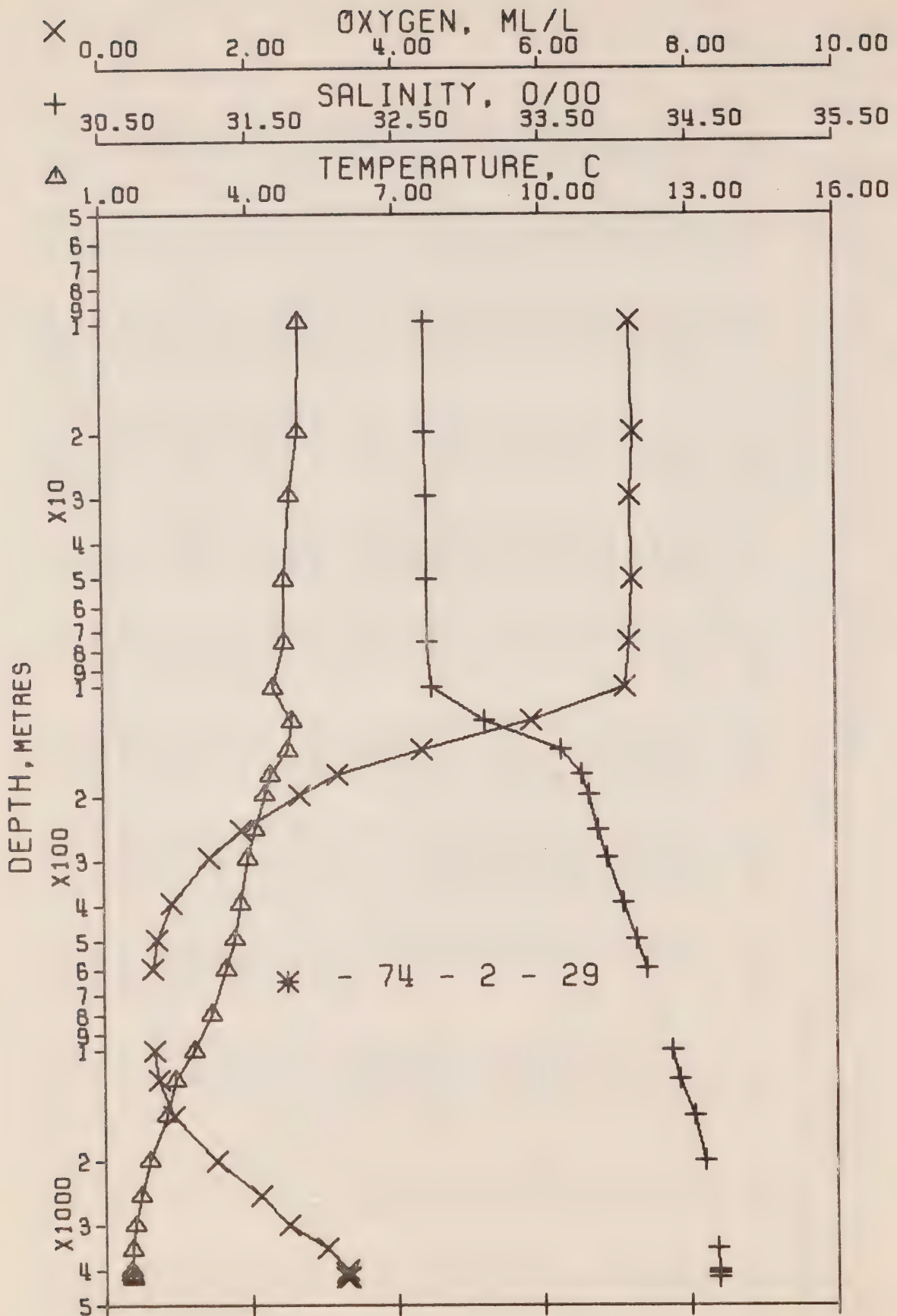


OFFSHORE OCEANOGRAPHY GROUP
 POSITION 50-0.0 N. 145-0.0 W GMT 17.3
 HYDROGRAPHIC CAST DATA

REFERENCE NO. 74- 2- 23

DATE 22/ 3/74

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	UXY	SOUND
0	4.80	32.715	0	25.913	210.1	4.80	209.9	0.0	0.0	7.24	1467.
10	4.79	32.713	10	25.916	209.9	4.79	209.5	0.21	0.01	7.26	1467.
20	4.79	32.719	20	25.917	209.8	4.79	209.5	0.42	0.04	7.26	1467.
30	4.78	32.720	30	25.919	209.8	4.78	209.3	0.63	0.10	7.19	1463.
49	4.77	32.724	49	25.923	209.6	4.77	208.9	1.03	0.26	7.26	1463.
74	4.55	32.729	74	25.951	207.1	4.54	206.3	1.56	0.59	7.15	1467.
100	4.46	32.770	99	25.993	203.3	4.45	202.2	2.08	1.06	7.02	1467.
125	4.92	33.247*	124	26.321	172.6	4.91	171.1	2.55	1.60	0.0	1470.
150	4.53	33.732	149	26.742	132.8	4.57	131.1	2.94	2.13	3.94	1470.
175	4.42	33.801	174	26.814	126.2	4.41	124.2	3.26	2.67	2.93	1470.
199	4.34	33.822	198	26.839	123.9	4.33	121.8	3.56	3.24	2.62	1470.
250	4.17	33.884	248	26.906	118.0	4.15	115.4	4.17	4.64	1.96	1470.
300	4.02	33.932	293	26.960	113.3	4.00	110.3	4.76	6.27	1.46	1470.
401	3.86	34.049	398	27.069	103.6	3.83	99.8	5.95	10.18	0.98	1472.
500	3.73	34.122	496	27.140	97.7	3.69	93.1	6.84	14.75	0.73	1473.
599	3.56	34.195	594	27.215	91.1	3.52	85.9	7.78	19.98	0.68	1474.
799	3.16	34.290	792	27.329	81.2	3.11	75.1	9.49	32.23	0.68	1475.
1004	2.87	34.382	994	27.428	72.6	2.80	65.5	11.06	46.62	0.64	1478.
1201	2.62	34.436	1189	27.494	67.0	2.54	59.3	12.44	62.09	0.65	1430.
1496	2.30	34.514	1480	27.583	59.2	2.20	50.7	14.29	97.56	0.79	1484.
2019	1.94	34.576	1994	27.661	52.7	1.80	43.0	17.18	139.33	1.43	1491.
2406	1.78	34.609*	2374	27.700	49.7	1.61	39.1	19.15	183.39	0.0	1497.
2922	1.63	34.645	2880	27.740	46.8	1.42	35.1	21.63	251.31	2.50	1505.
3430	1.54	34.677	3377	27.772	44.7	1.28	31.7	23.95	326.20	2.99	1513.
3947	1.51	34.691	3881	27.786	44.6	1.19	30.1	26.23	412.18	3.25	1522.
4052	1.51	34.688	3984	27.783	45.1	1.18	30.3	26.71	431.49	3.24	1524.
4149	1.53	34.687	4078	27.781	45.8	1.19	30.5	27.15	449.98	3.30	1525.
4159	1.52	34.690	4088	27.784	45.4	1.18	30.1	27.20	451.96	3.34	1525.



DATE 27/ 3/74

REFERENCE NO. 74- 2- 29

OFF SHORE OCEANOGRAPHY GROUP

POSITION 30- 0.0 N. 145- 0.0 W GMT 17.8

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH:	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.05	32.715	0	25.885	212.8	5.05	212.5	0.0	0.0	7.13	1453.
10	5.04	32.714	10	25.886	212.8	5.04	212.4	0.21	0.01	7.22	1463.
20	5.01	32.714	20	25.889	212.6	5.01	212.2	0.43	0.04	7.25	1453.
30	4.84	32.719	30	25.912	210.5	4.84	210.0	0.64	0.10	7.21	1462.
51	4.72	32.723	51	25.928	209.1	4.72	208.5	1.08	0.28	7.25	1463.
77	4.72	32.725	75	25.930	209.1	4.71	208.3	1.61	0.63	7.21	1463.
102	4.47	32.749	101	25.975	205.0	4.45	203.9	2.14	1.10	7.15	1457.
126	4.36	33.114	125	26.222	181.9	4.85	180.4	2.61	1.65	5.85	1470.
151	4.77	33.635	150	26.645	142.2	4.76	140.3	3.02	2.22	4.35	1471.
176	4.41	33.769	175	26.790	128.5	4.40	126.5	3.35	2.78	3.21	1470.
200	4.31	33.824	199	26.844	123.5	4.30	121.4	3.65	3.37	2.69	1470.
250	4.10	33.879	248	26.910	117.7	4.08	115.1	4.25	4.73	1.89	1470.
299	3.94	33.936	297	26.971	112.1	3.92	109.3	4.82	5.32	1.44	1470.
398	3.79	34.052	395	27.079	102.7	3.76	99.0	5.88	10.09	0.92	1471.
498	3.68	34.143	494	27.162	95.5	3.64	91.1	6.86	14.60	0.72	1472.
601	3.49	34.212	596	27.235	89.2	3.45	84.0	7.81	19.93	0.65	1473.
803	3.18	34.314*	796	27.346	79.8	3.12	73.5	9.52	32.10	0.0	1475.
1009	2.83	34.384	999	27.434	72.0	2.76	65.1	11.07	46.48	0.69	1473.
1213	2.44	34.433	1201	27.506	65.3	2.36	58.1	12.47	62.37	0.74	1479.
1521	2.26	34.535	1504	27.603	57.3	2.15	48.8	14.35	88.46	0.93	1484.
2029	1.91	34.597	2004	27.680	50.8	1.77	41.2	17.06	137.55	1.51	1491.
2536	1.73	34.636*	2502	27.726	47.5	1.55	36.7	19.53	195.23	2.13	1499.
3045	1.60	34.662*	3000	27.756	45.6	1.37	33.6	21.89	262.28	2.51	1507.
3554	1.53	34.679	3498	27.775	44.8	1.25	31.5	24.19	339.47	3.02	1515.
4068	1.51	34.695	3999	27.789	44.7	1.18	29.7	26.47	428.11	3.29	1524.
4171	1.52	34.694	4100	27.787	45.1	1.18	29.8	26.93	447.64	3.28	1525.
4264	1.54	34.690	4190	27.783	46.0	1.19	30.2	27.36	465.84	3.32	1527.
4274	1.53	34.690	4200	27.784	45.8	1.18	30.1	27.41	467.89	3.23	1528.

RESULTS OF STD OBSERVATIONS

(P-74-2)

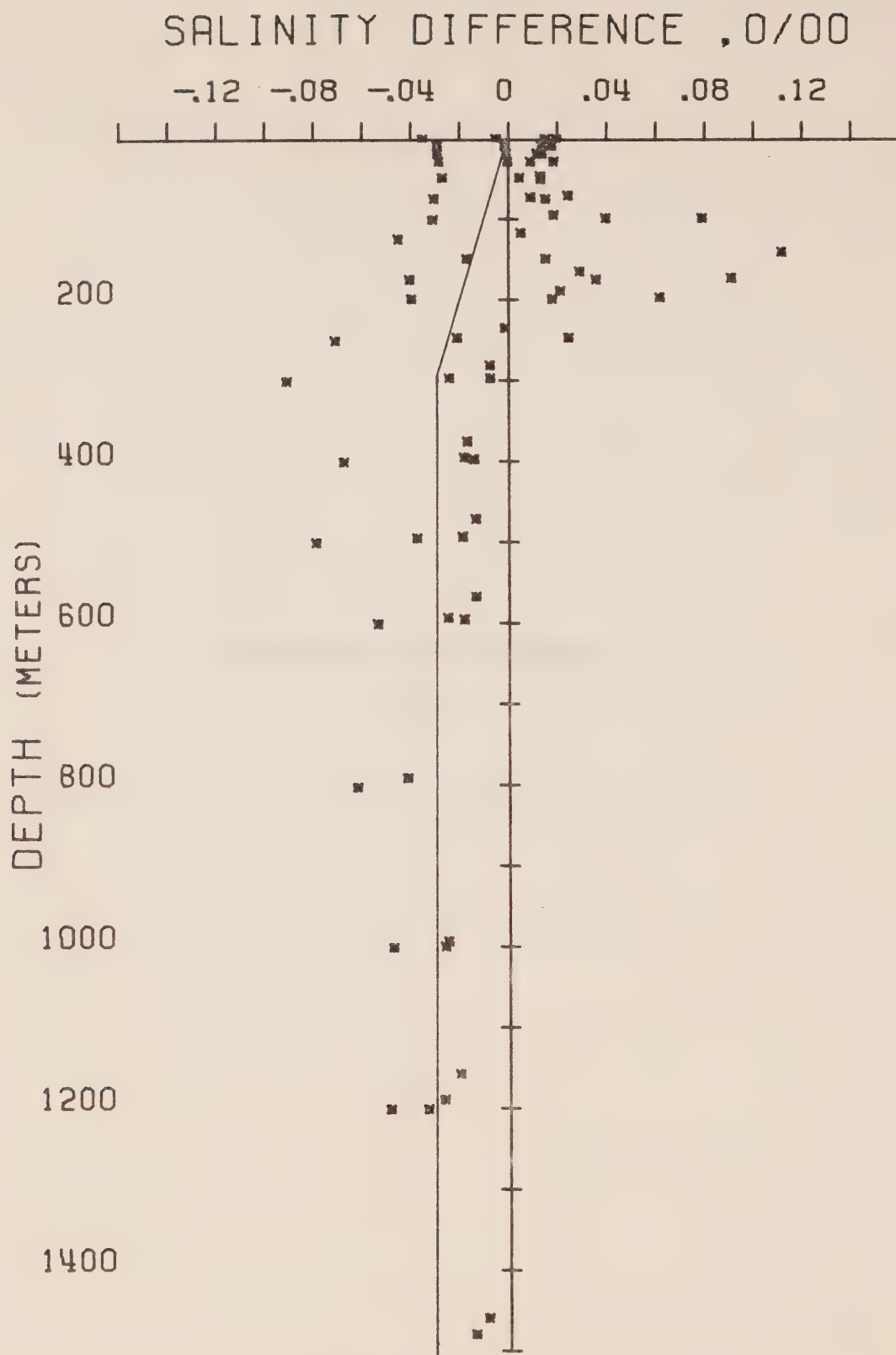


Figure 13 Salinity difference between hydro data and STD. P-74-2

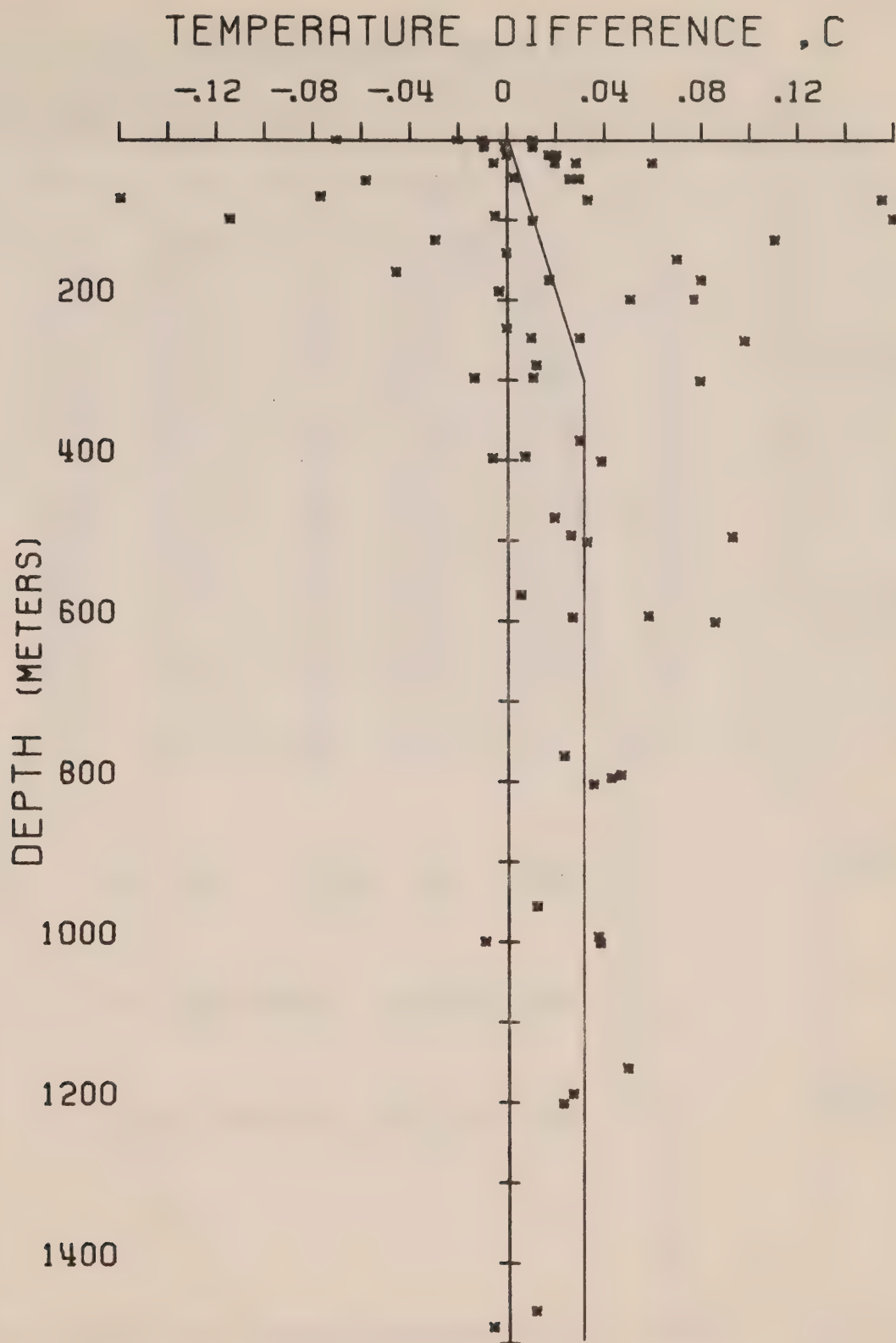
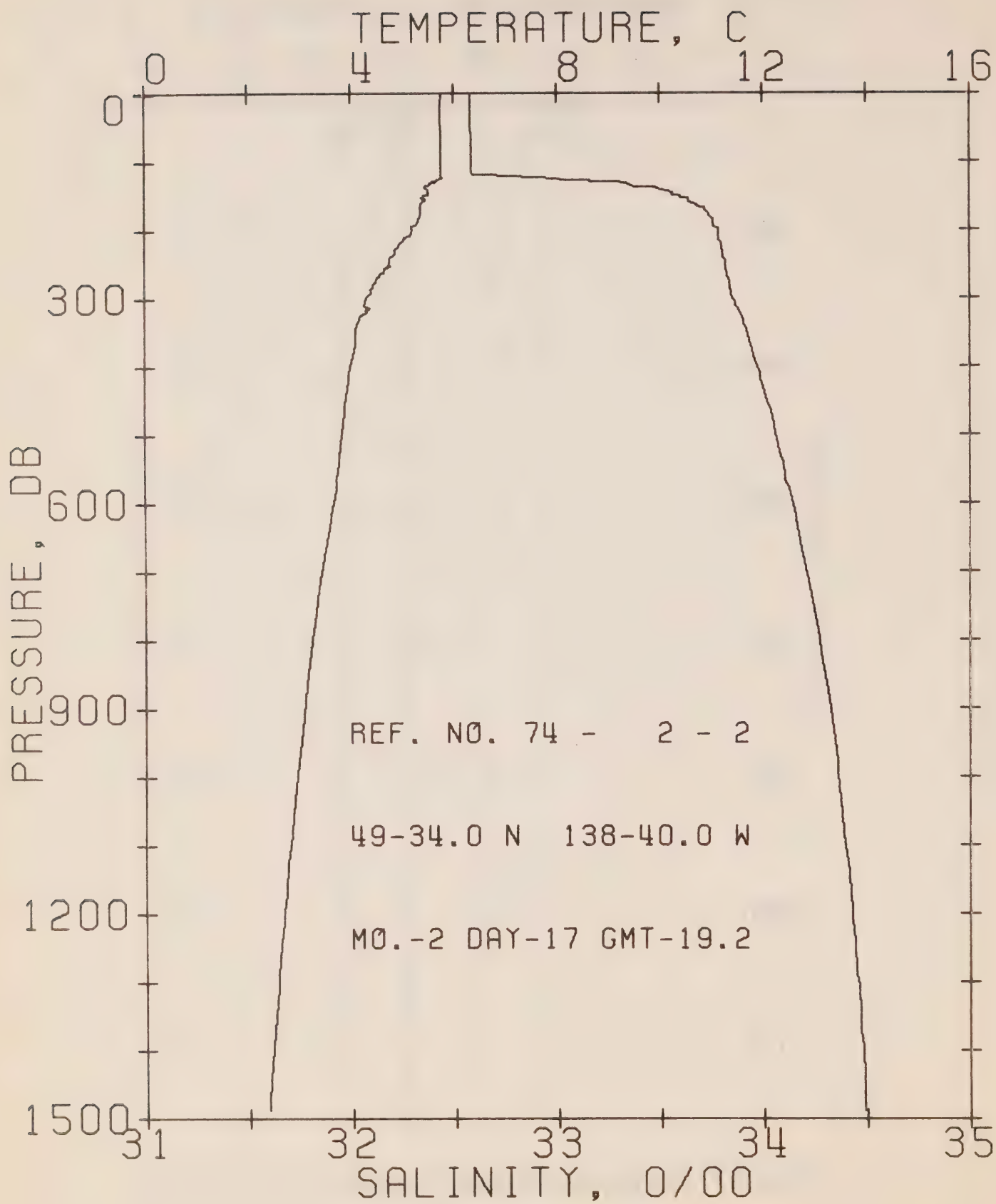


Figure 14 Temperature difference between hydro data and STD. P-74-2



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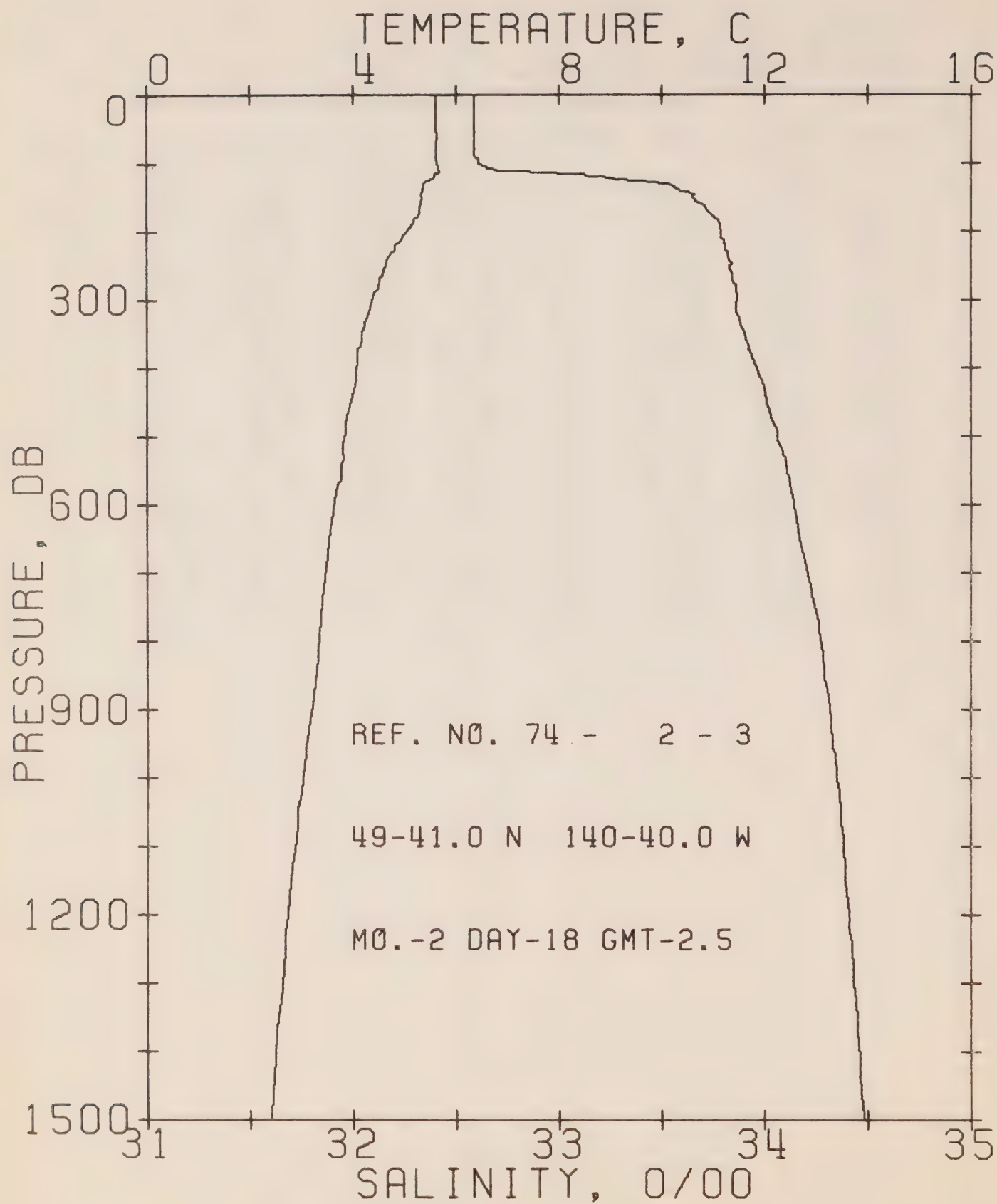
REFERENCE NO. 74- 2- 2

DATE 17/ 2/74

POSITION 49-34.0N, 138-40.0W GMT 19.2

RESULTS OF STP CAST 155 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.76	32.58	0	25.70	230.5	0.0	0.0	1471.
10	5.74	32.58	10	25.70	230.5	0.23	0.01	1471.
20	5.73	32.58	20	25.70	230.5	0.46	0.05	1471.
30	5.74	32.58	30	25.70	230.7	0.69	0.11	1471.
50	5.75	32.58	50	25.70	231.0	1.15	0.29	1472.
75	5.75	32.59	75	25.71	230.6	1.73	0.66	1472.
100	5.75	32.59	99	25.71	230.8	2.31	1.18	1473.
125	5.77	32.96	124	26.00	203.4	2.88	1.83	1473.
150	5.50	33.56	149	26.50	155.9	3.30	2.42	1474.
175	5.36	33.73	174	26.65	141.8	3.67	3.03	1474.
200	5.21	33.79	199	26.72	135.9	4.01	3.69	1474.
225	4.90	33.80	223	26.76	132.0	4.35	4.42	1473.
250	4.76	33.82	248	26.79	129.2	4.68	5.21	1473.
300	4.31	33.85	298	26.87	122.3	5.30	6.96	1471.
400	3.98	33.97	397	27.00	110.7	6.46	11.09	1472.
500	3.81	34.06	496	27.08	102.9	7.53	15.96	1473.
600	3.65	34.15	595	27.17	95.7	8.52	21.54	1474.
800	3.23	34.28	793	27.31	83.1	10.31	34.22	1476.
1000	2.93	34.36	990	27.41	74.8	11.88	48.60	1478.
1200	2.67	34.43	1188	27.48	68.0	13.30	64.56	1480.



OFFSHORE OCEANOGRAPHY GROUP

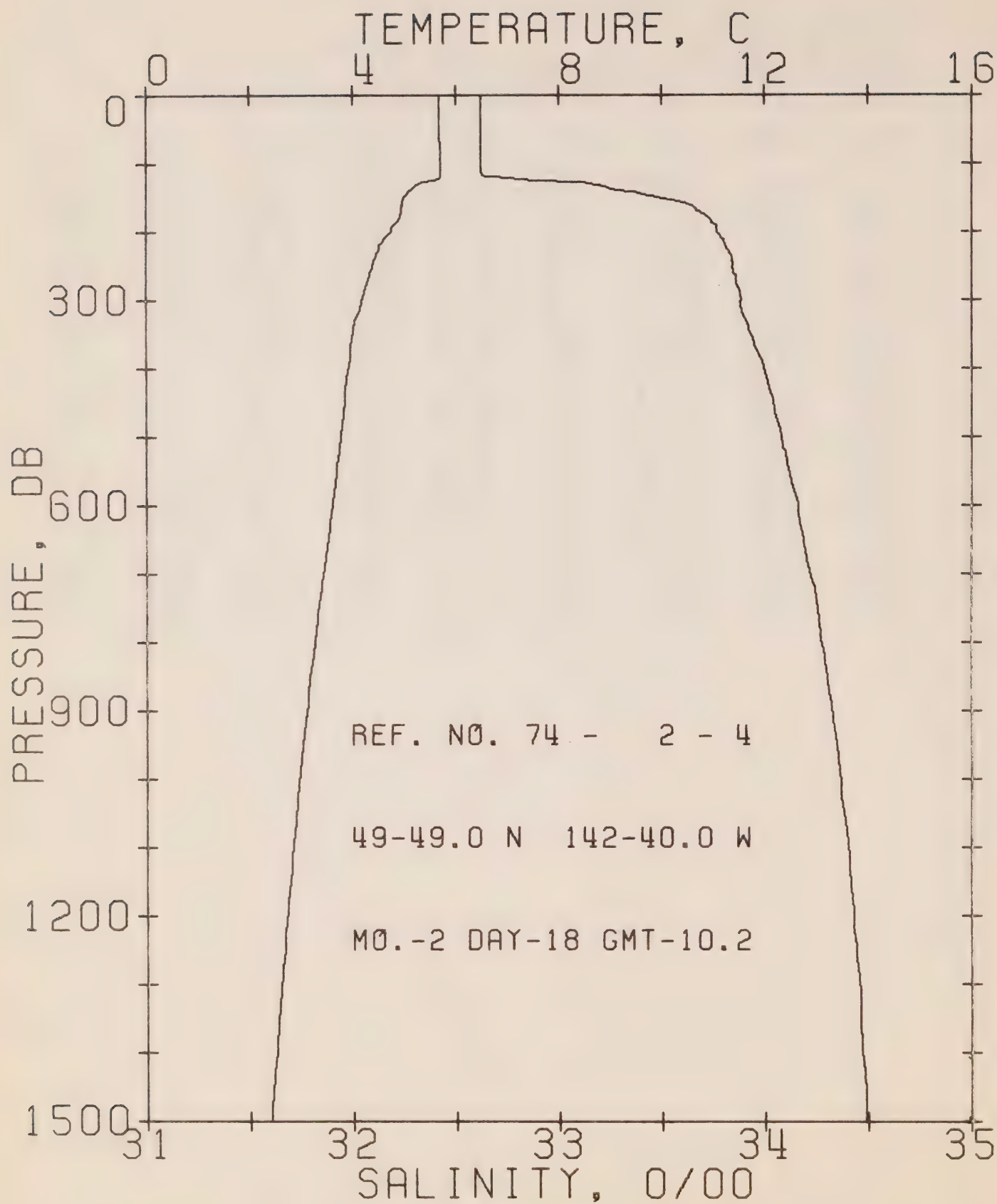
REFERENCE NO. 74- 2- 3

DATE 18/ 2/74

POSITION 49-41.0N, 140-40.0W GMT 2.5

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.61	32.59	0	25.72	228.0	0.0	0.0	1470.
10	5.61	32.59	10	25.72	228.4	0.23	0.01	1470.
20	5.61	32.59	20	25.72	228.5	0.46	0.05	1471.
30	5.61	32.59	30	25.72	228.6	0.69	0.10	1471.
50	5.61	32.59	50	25.72	228.8	1.14	0.29	1471.
75	5.61	32.59	75	25.72	229.0	1.71	0.66	1472.
100	5.64	32.61	99	25.73	228.1	2.29	1.17	1472.
125	5.46	33.36	124	26.35	170.2	2.80	1.75	1473.
150	5.33	33.65	149	26.59	147.0	3.19	2.29	1473.
175	5.25	33.74	174	26.67	140.2	3.55	2.89	1473.
200	5.04	33.79	199	26.74	134.0	3.89	3.54	1473.
225	4.79	33.81	223	26.78	130.0	4.22	4.25	1472.
250	4.63	33.83	248	26.81	127.0	4.54	5.03	1472.
300	4.36	33.87	298	26.87	121.8	5.16	6.77	1472.
400	4.06	33.96	397	26.98	112.5	6.34	10.96	1472.
500	3.83	34.06	496	27.08	103.3	7.41	15.89	1473.
600	3.62	34.14	595	27.17	96.0	8.41	21.46	1474.
800	3.33	34.27	793	27.30	84.6	10.20	34.24	1476.
1000	3.00	34.35	990	27.39	76.4	11.81	48.97	1478.
1200	2.71	34.41	1188	27.46	69.9	13.28	65.34	1490.



OFFSHORE OCEANOGRAPHY GROUP

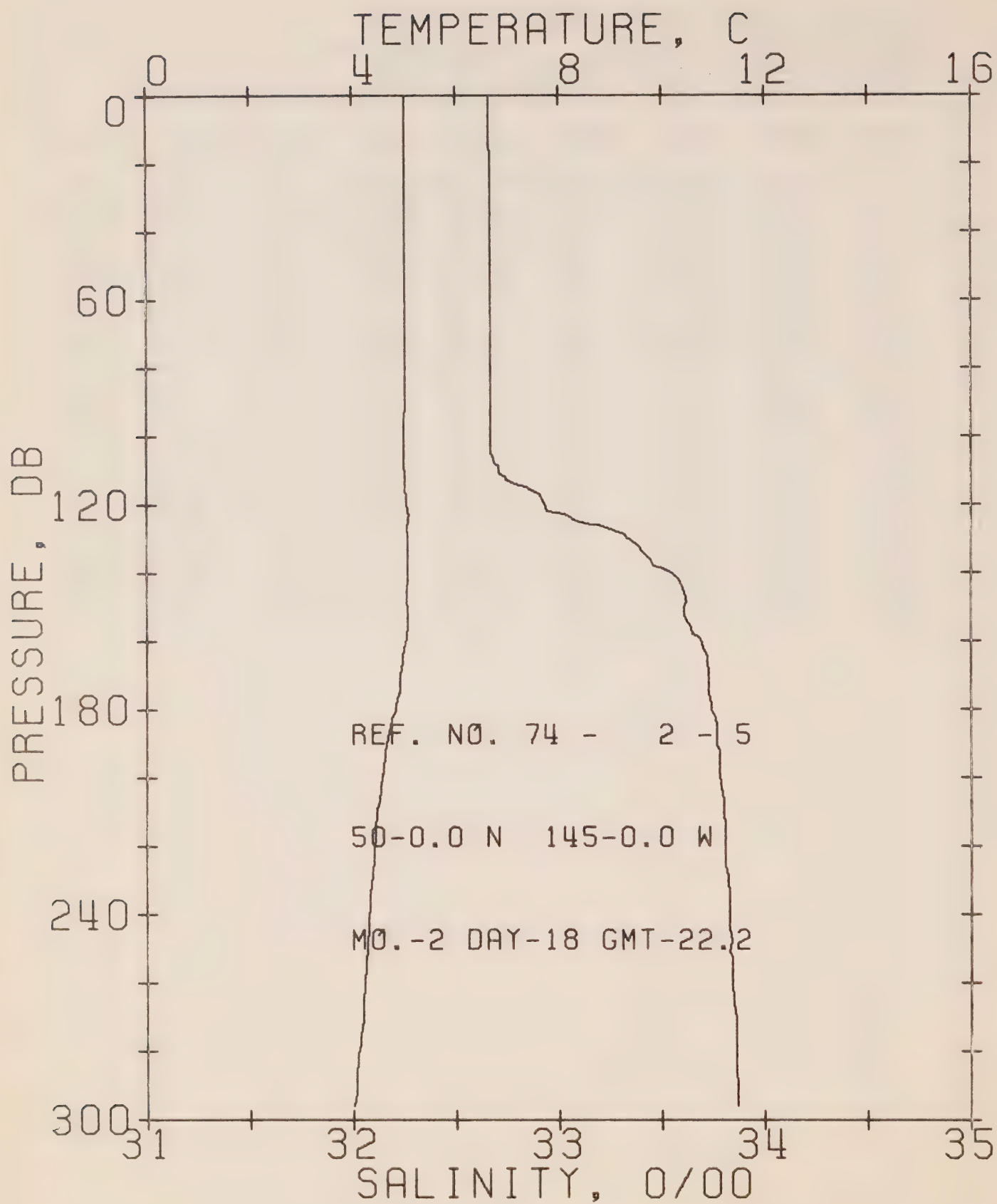
REFERENCE NO. 74- 2- 4

DATE 18/ 2/74

POSITION 49-49.0N, 142-40.0W GMT 10.2

RESULTS OF STP CAST 149 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.68	32.62	0	25.74	226.6	0.0	0.0	1471.
10	5.68	32.62	10	25.74	226.9	0.23	0.01	1471.
20	5.68	32.62	20	25.74	227.0	0.45	0.05	1471.
30	5.68	32.62	30	25.74	227.1	0.68	0.10	1471.
50	5.69	32.62	50	25.74	227.4	1.14	0.29	1471.
75	5.70	32.62	75	25.74	227.8	1.70	0.65	1472.
100	5.70	32.62	99	25.74	228.0	2.27	1.16	1472.
125	5.56	32.89	124	25.97	206.5	2.84	1.81	1473.
150	4.99	33.49	149	26.50	155.7	3.27	2.42	1471.
175	4.92	33.71	174	26.68	138.6	3.64	3.01	1472.
200	4.74	33.77	199	26.75	132.2	3.97	3.66	1472.
225	4.50	33.81	223	26.82	126.5	4.30	4.36	1471.
250	4.37	33.85	248	26.86	122.9	4.61	5.11	1471.
300	4.16	33.89	298	26.91	117.9	5.21	6.80	1471.
400	3.91	33.99	397	27.02	108.3	6.35	10.85	1472.
500	3.77	34.08	496	27.10	101.0	7.39	15.63	1473.
600	3.60	34.16	595	27.18	94.1	8.37	21.10	1474.
800	3.25	34.27	793	27.31	83.6	10.14	33.73	1476.
1000	2.94	34.37	990	27.41	74.6	11.72	48.15	1478.
1200	2.71	34.43	1188	27.48	68.5	13.15	64.15	1480.



OFFSHORE OCEANOGRAPHY GROUP

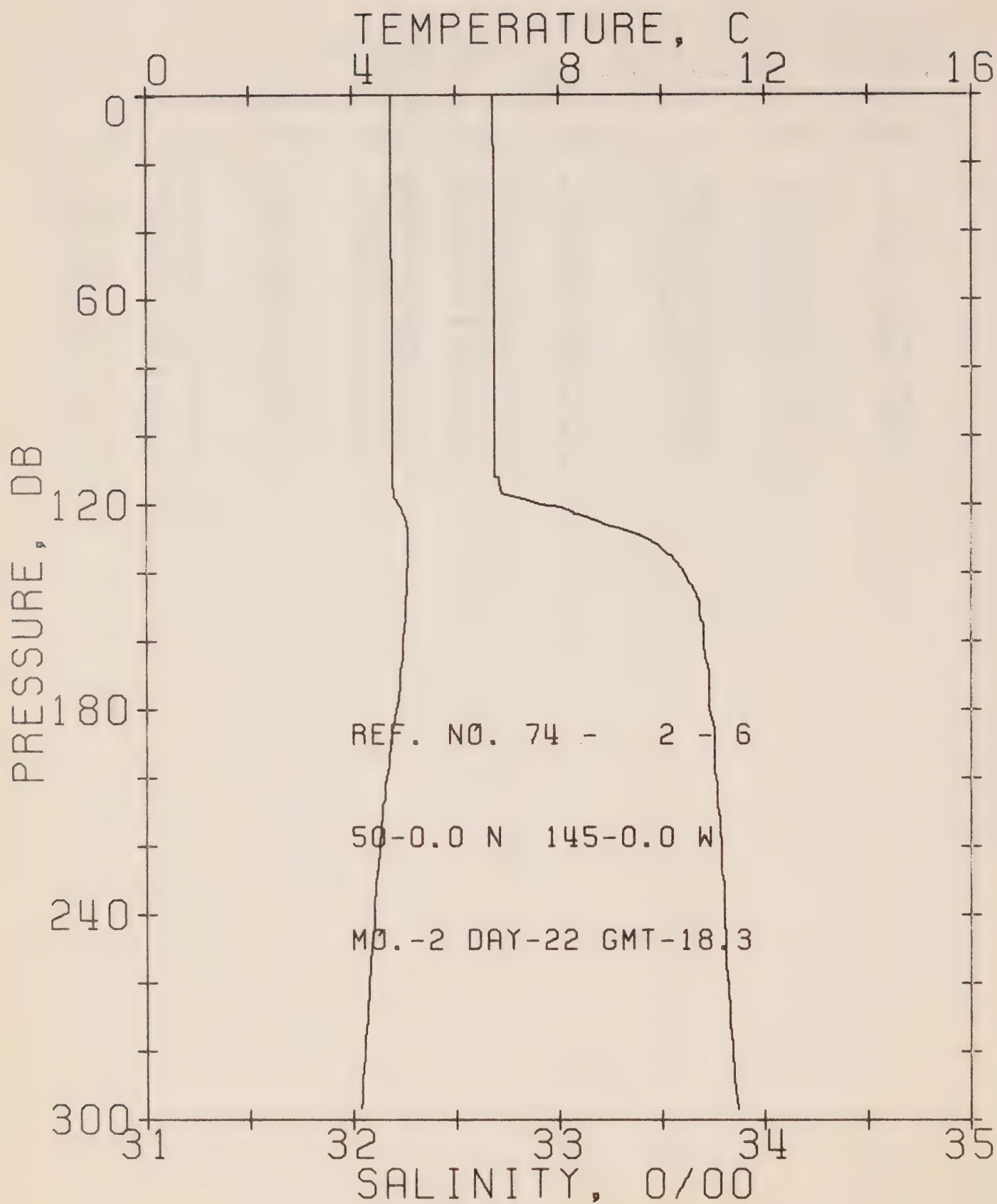
REFERENCE NO. 74- 2- 5

DATE 18/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 22.2

RESULTS OF STP CAST 101 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.02	32.66	0	25.85	216.3	0.0	0.0	1468.
10	5.01	32.66	10	25.85	216.6	0.22	0.01	1468.
20	5.01	32.67	20	25.85	216.0	0.43	0.04	1468.
30	5.01	32.67	30	25.85	215.9	0.65	0.10	1468.
50	5.01	32.67	50	25.85	216.1	1.08	0.28	1469.
75	5.00	32.67	75	25.86	216.2	1.62	0.62	1469.
100	4.99	32.67	99	25.86	216.4	2.16	1.10	1469.
125	5.06	33.10	124	26.19	185.2	2.68	1.69	1471.
150	5.06	33.61	149	26.59	147.2	3.08	2.25	1472.
175	4.90	33.73	174	26.71	136.7	3.43	2.83	1472.
200	4.56	33.78	199	26.78	129.3	3.76	3.46	1471.
225	4.40	33.81	223	26.82	125.7	4.07	4.15	1471.
250	4.26	33.83	248	26.86	122.7	4.38	4.90	1470.



OFFSHORE OCEANOGRAPHY GROUP

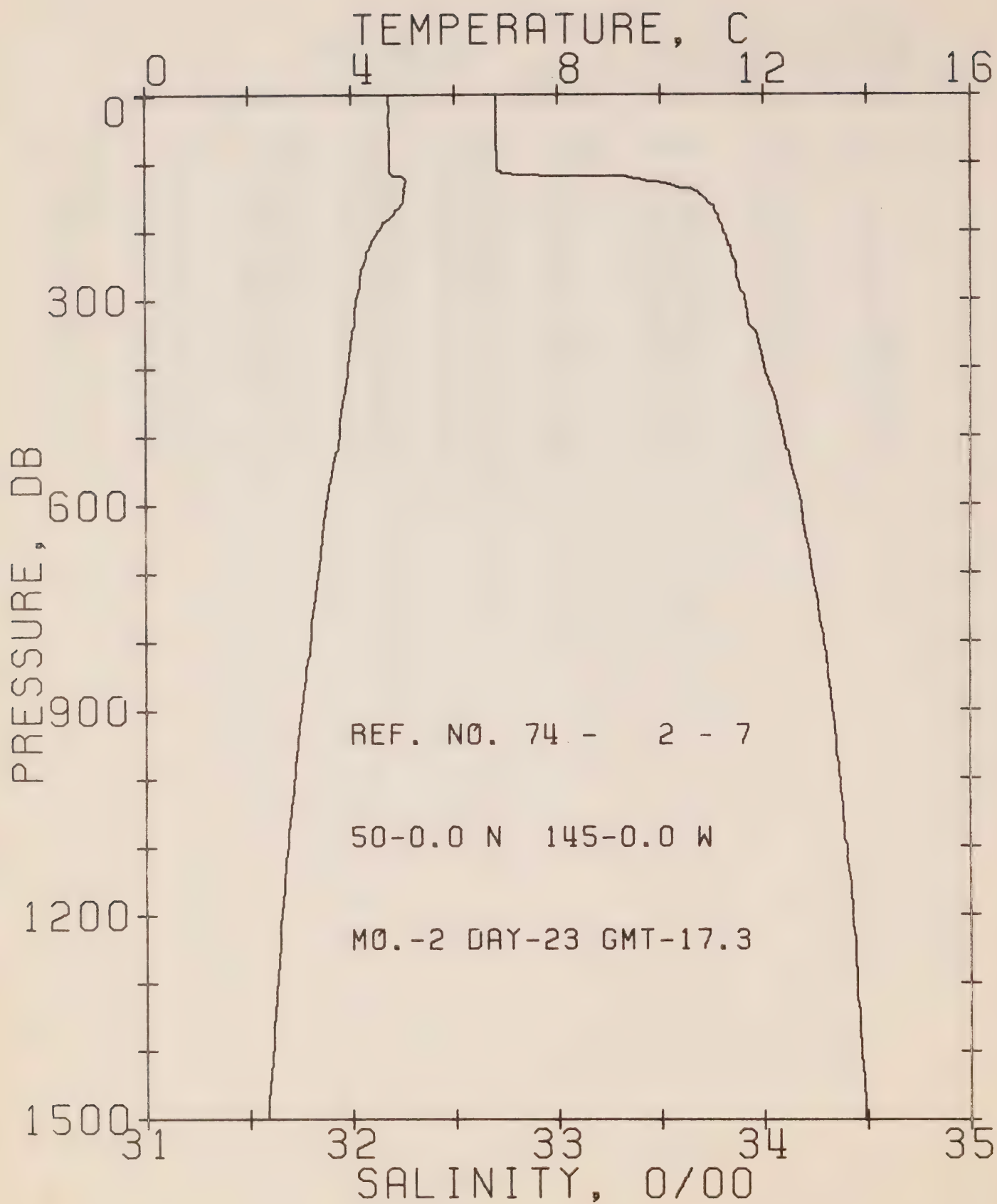
REFERENCE NO. 74- 2- 6

DATE 22/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.3

RESULTS OF STP CAST 92 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.76	32.68	0	25.89	212.1	0.0	0.0	1467.
10	4.75	32.68	10	25.89	212.3	0.21	0.01	1467.
20	4.76	32.69	20	25.90	211.7	0.42	0.04	1467.
30	4.76	32.69	30	25.90	211.8	0.64	0.10	1467.
50	4.77	32.69	50	25.90	212.1	1.06	0.27	1468.
75	4.77	32.69	75	25.90	212.3	1.59	0.61	1468.
100	4.77	32.69	99	25.90	212.6	2.12	1.08	1469.
125	5.03	33.20	124	26.27	177.3	2.64	1.67	1471.
150	5.01	33.68	149	26.65	141.4	3.02	2.20	1472.
175	4.90	33.73	174	26.71	136.7	3.37	2.78	1472.
200	4.63	33.76	199	26.76	131.8	3.70	3.42	1471.
225	4.48	33.79	223	26.80	128.1	4.02	4.12	1471.
250	4.33	33.81	248	26.83	125.3	4.34	4.89	1471.



OFFSHORE OCEANOGRAPHY GROUP

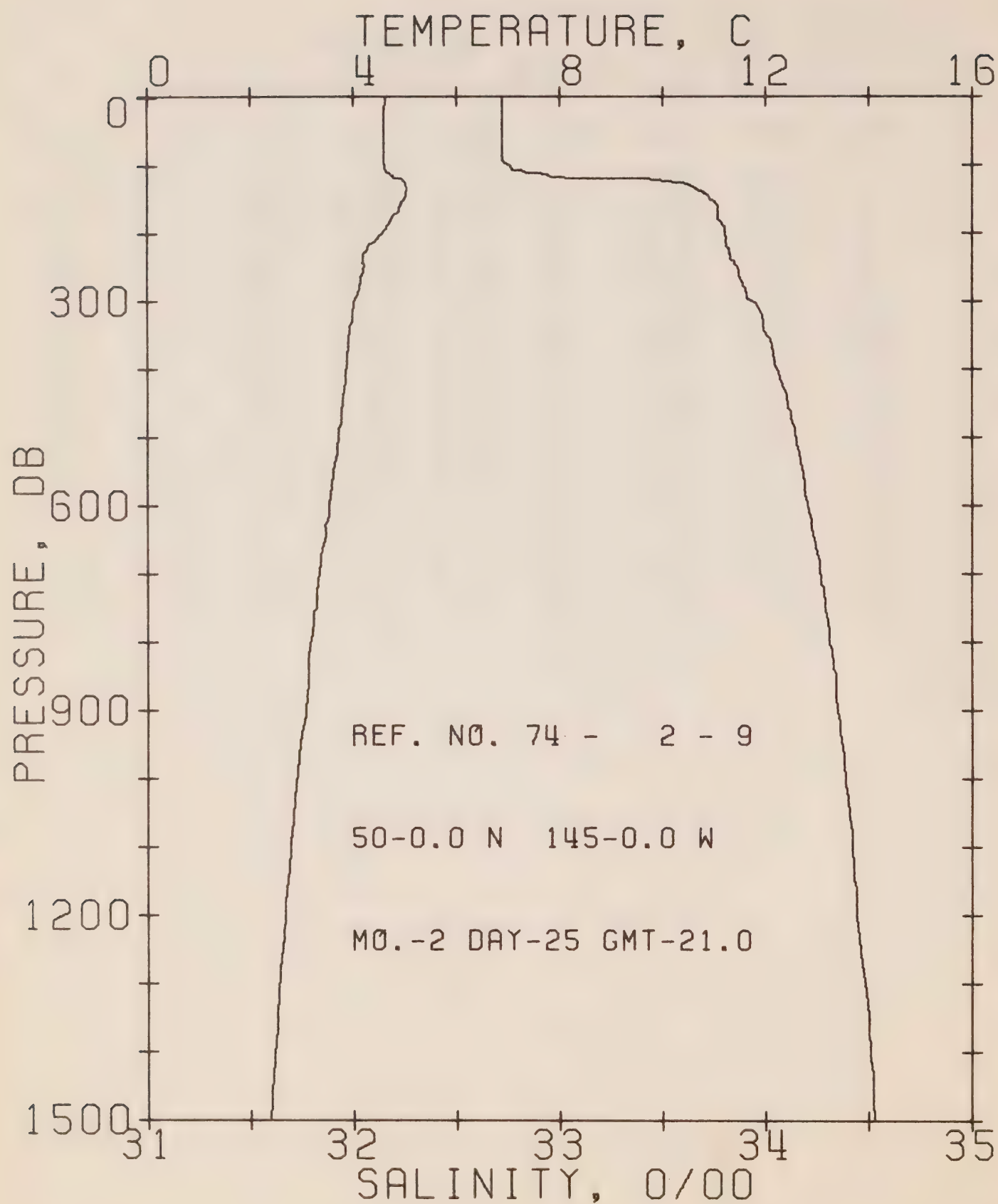
REFERENCE NO. 74- 2- 7

DATE 23/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 158 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.72	32.70	0	25.91	210.2	0.0	0.0	1467.
10	4.73	32.70	10	25.91	210.6	0.21	0.01	1467.
20	4.74	32.70	20	25.91	210.8	0.42	0.04	1467.
30	4.73	32.70	30	25.91	210.7	0.63	0.10	1467.
50	4.74	32.70	50	25.91	211.0	1.05	0.27	1468.
75	4.75	32.70	75	25.91	211.4	1.58	0.61	1468.
100	4.76	32.71	99	25.91	210.9	2.11	1.08	1469.
125	5.06	33.43	124	26.45	160.4	2.61	1.64	1471.
150	5.02	33.70	149	26.67	139.6	2.98	2.16	1472.
175	4.82	33.78	174	26.75	132.0	3.32	2.72	1471.
200	4.51	33.81	199	26.81	126.6	3.64	3.34	1471.
225	4.34	33.84	223	26.85	122.9	3.95	4.02	1470.
250	4.23	33.87	248	26.89	119.7	4.26	4.75	1470.
300	4.08	33.91	298	26.94	115.5	4.85	6.41	1471.
400	3.93	34.00	397	27.03	107.8	5.97	10.40	1472.
500	3.75	34.10	496	27.12	99.7	7.00	15.13	1473.
600	3.50	34.18	595	27.21	91.7	7.96	20.48	1473.
800	3.18	34.29	793	27.33	81.5	9.69	32.80	1476.
1000	2.87	34.37	990	27.42	73.9	11.24	46.97	1478.
1200	2.61	34.43	1188	27.49	67.3	12.65	62.77	1480.



OFFSHORE OCEANOGRAPHY GROUP

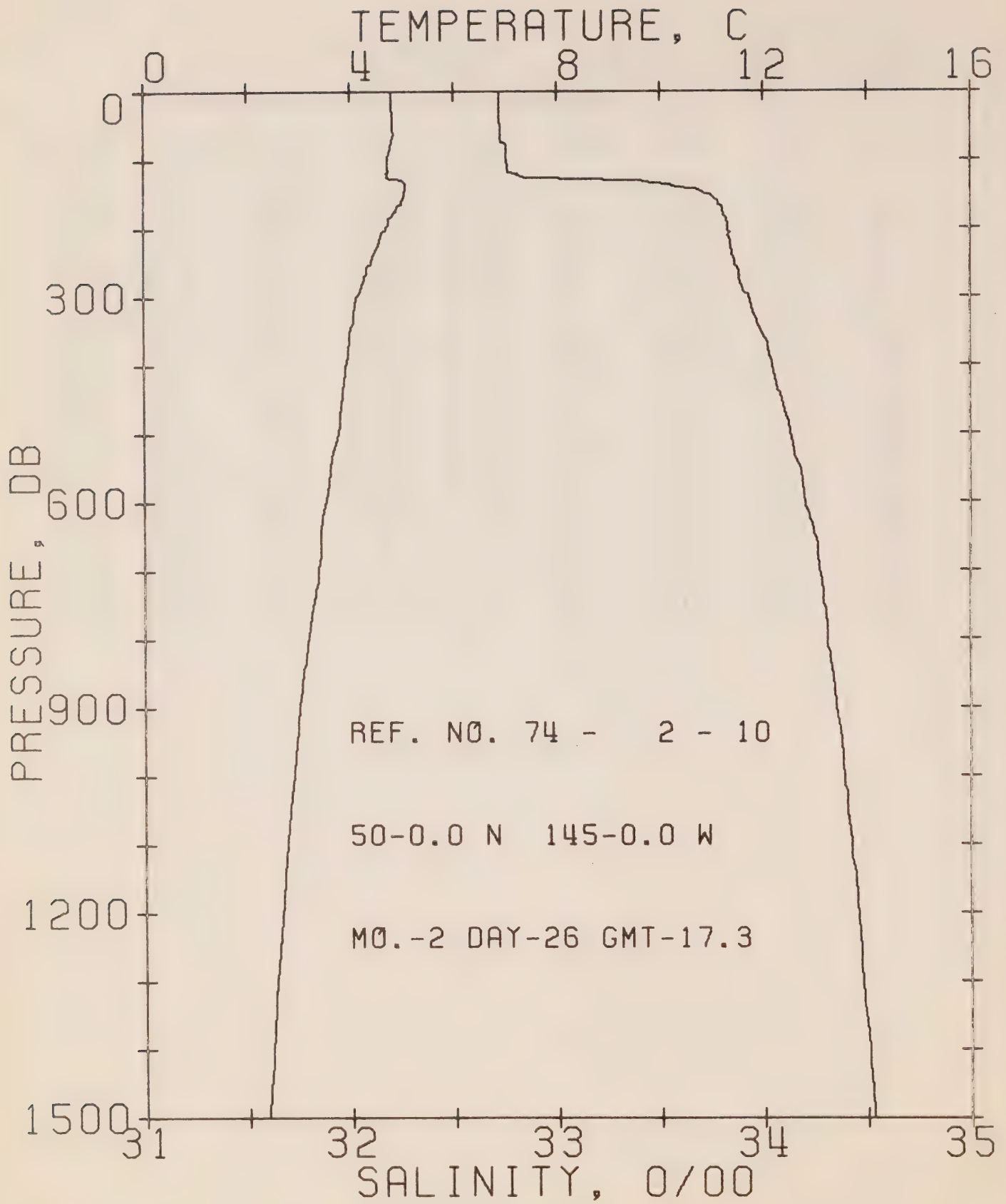
REFERENCE NO. 74- 2- 9

DATE 25/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 21.0

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.65	32.72	0	25.93	208.0	0.0	0.0	1467.
10	4.61	32.72	10	25.94	207.9	0.21	0.01	1467.
20	4.58	32.72	20	25.94	207.7	0.42	0.04	1467.
30	4.58	32.72	30	25.94	207.7	0.62	0.10	1467.
50	4.59	32.72	50	25.94	208.0	1.04	0.26	1467.
75	4.59	32.72	75	25.94	208.2	1.56	0.60	1467.
100	4.62	32.75	99	25.96	206.4	2.08	1.06	1463.
125	5.00	33.55	124	26.55	150.7	2.56	1.60	1471.
150	4.97	33.73	149	26.70	137.0	2.91	2.10	1472.
175	4.77	33.77	174	26.75	132.3	3.25	2.66	1471.
200	4.56	33.80	199	26.80	127.9	3.57	3.28	1471.
225	4.26	33.82	223	26.85	123.5	3.89	3.96	1470.
250	4.22	33.86	248	26.88	120.4	4.19	4.69	1470.
300	4.00	33.94	298	26.97	112.5	4.78	6.34	1470.
400	3.85	34.05	397	27.07	103.2	5.85	10.15	1471.
500	3.72	34.15	496	27.16	95.6	6.84	14.69	1473.
600	3.52	34.20	595	27.23	90.2	7.77	19.88	1474.
800	3.17	34.31	793	27.34	79.8	9.46	31.90	1475.
1000	2.88	34.39	990	27.43	72.3	10.97	45.82	1478.
1200	2.67	34.44	1183	27.49	67.3	12.36	61.34	1480.



OFFSHORE OCEANOGRAPHY GROUP

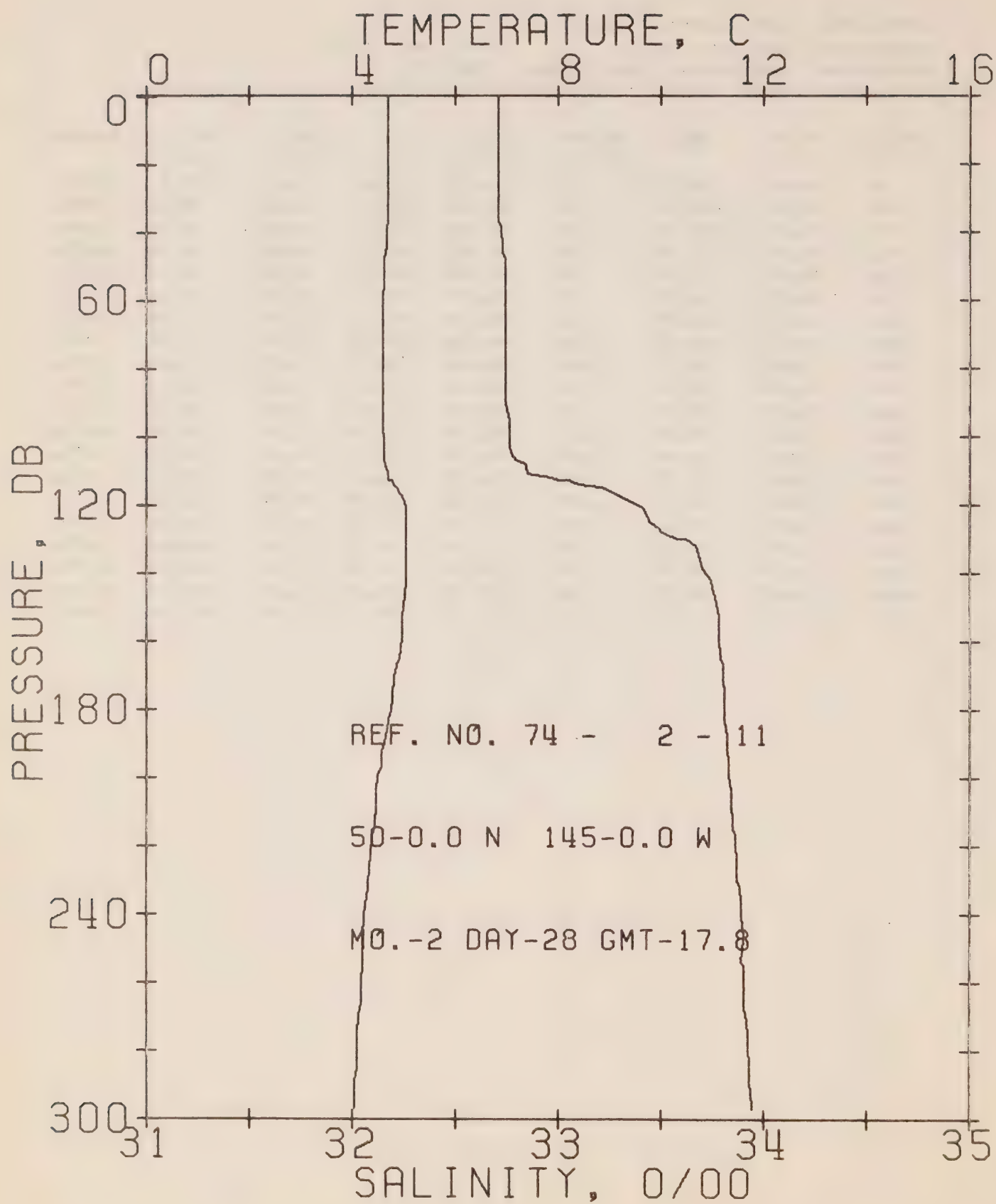
REFERENCE NO. 74- 2- 10

DATE 26/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 159 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.81	32.72	0	25.92	209.6	0.0	0.0	1467.
10	4.81	32.72	10	25.92	209.9	0.21	0.01	1467.
20	4.81	32.72	20	25.92	210.0	0.42	0.04	1468.
30	4.82	32.72	30	25.91	210.2	0.63	0.10	1468.
50	4.83	32.73	50	25.92	209.7	1.05	0.27	1469.
75	4.79	32.74	75	25.94	208.6	1.57	0.60	1468.
100	4.72	32.75	99	25.95	207.4	2.09	1.07	1468.
125	4.72	32.85	124	26.03	200.2	2.61	1.65	1469.
150	5.04	33.72	149	26.68	138.7	3.00	2.20	1472.
175	4.88	33.80	174	26.76	131.2	3.33	2.75	1472.
200	4.68	33.83	199	26.81	127.1	3.65	3.36	1471.
225	4.53	33.84	223	26.83	124.8	3.97	4.04	1471.
250	4.40	33.86	248	26.86	122.3	4.28	4.79	1471.
300	4.11	33.93	298	26.95	114.3	4.87	6.46	1471.
400	3.90	34.04	397	27.06	104.8	5.96	10.35	1472.
500	3.76	34.13	496	27.14	97.3	6.97	14.97	1473.
600	3.50	34.20	595	27.22	90.3	7.91	20.20	1473.
800	3.17	34.31	793	27.34	79.8	9.59	32.17	1475.
1000	2.87	34.39	990	27.43	72.3	11.10	46.03	1478.
1200	2.64	34.45	1188	27.51	66.0	12.48	61.49	1480.



OFFSHORE OCEANOGRAPHY GROUP

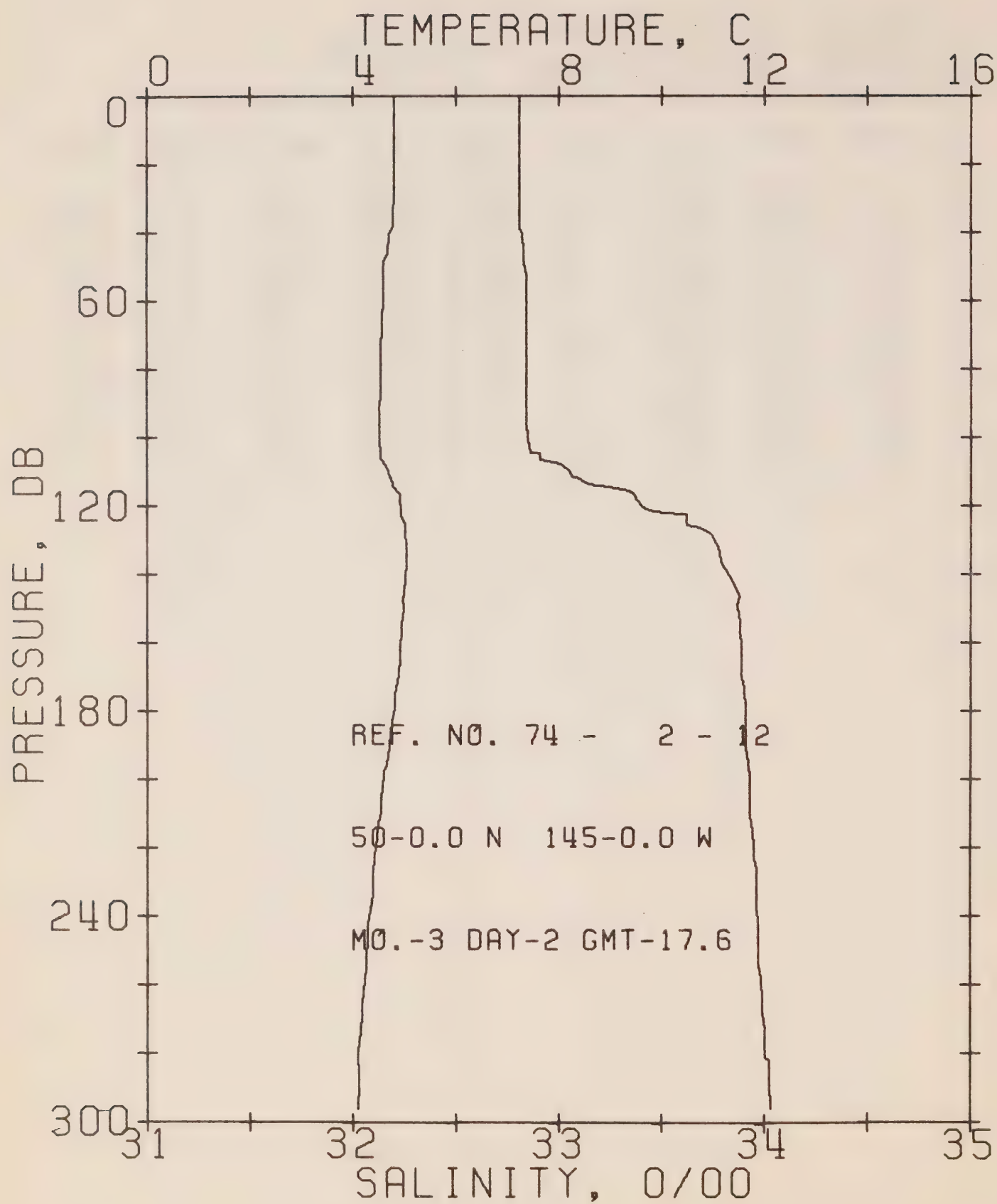
REFERENCE NO. 74- 2- 11

DATE 28/ 2/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.8

RESULTS OF STP CAST 89 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.68	32.71	0	25.92	209.0	0.0	0.0	1467.
10	4.68	32.71	10	25.92	209.3	0.21	0.01	1467.
20	4.68	32.71	20	25.92	209.4	0.42	0.04	1467.
30	4.68	32.71	30	25.92	209.5	0.63	0.10	1467.
50	4.61	32.74	50	25.95	206.7	1.04	0.27	1467.
75	4.59	32.74	75	25.95	206.8	1.56	0.60	1468.
100	4.61	32.76	99	25.97	205.6	2.08	1.06	1468.
125	5.03	33.45	124	26.47	158.6	2.54	1.58	1471.
150	4.98	33.77	149	26.73	134.2	2.90	2.08	1472.
175	4.77	33.81	174	26.78	129.4	3.23	2.63	1471.
200	4.48	33.83	199	26.83	124.6	3.54	3.23	1471.
225	4.32	33.87	223	26.88	120.6	3.85	3.90	1470.
250	4.20	33.90	248	26.91	117.4	4.15	4.62	1470.



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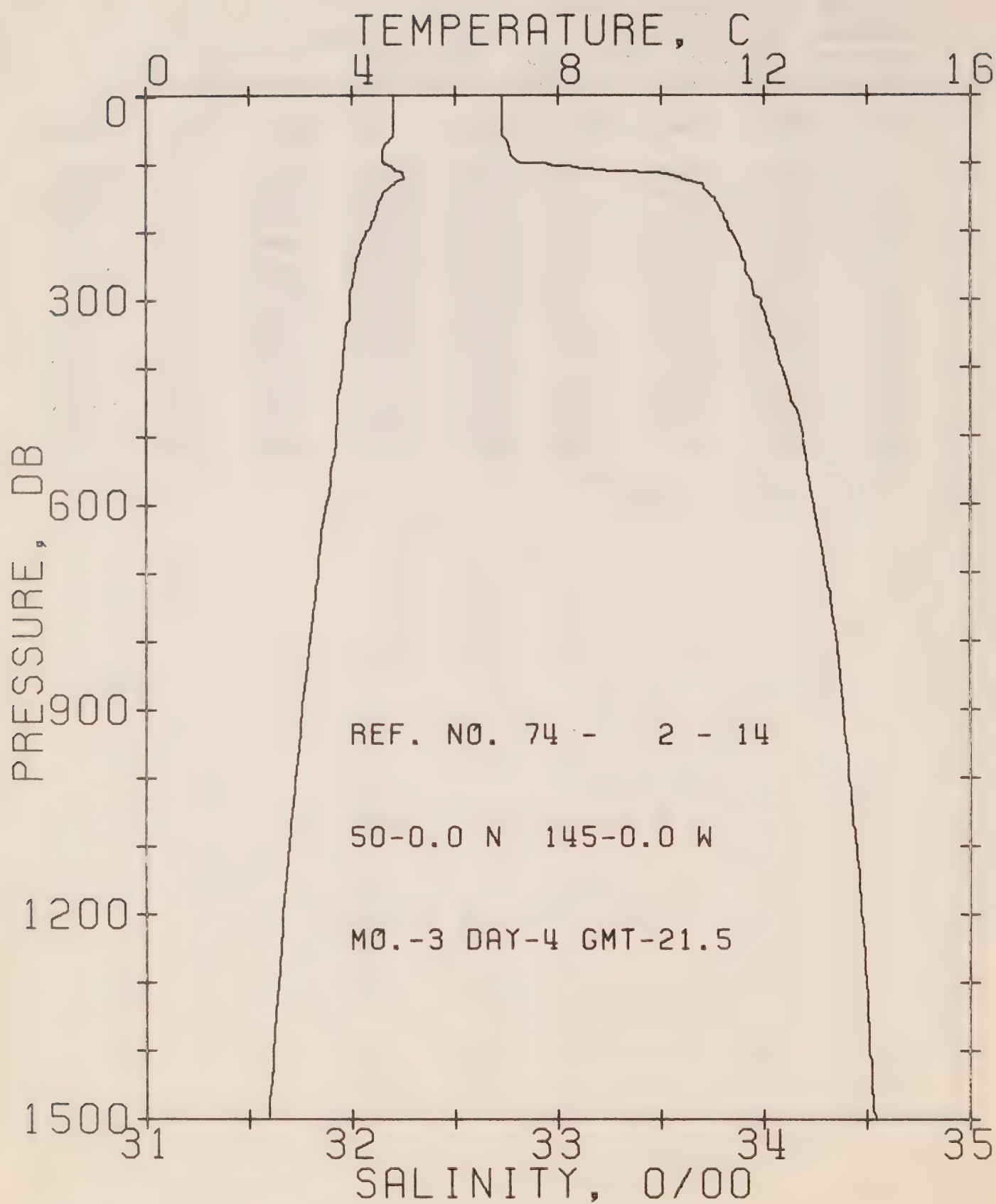
REFERENCE NO. 74- 2- 12

DATE 2/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.6

RESULTS OF STP CAST 102 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.79	32.81	0	25.99	202.7	0.0	0.0	1467.
10	4.79	32.81	10	25.99	203.0	0.20	0.01	1467.
20	4.79	32.81	20	25.99	203.1	0.41	0.04	1468.
30	4.79	32.81	30	25.99	203.0	0.61	0.09	1468.
50	4.60	32.83	50	26.03	199.6	1.01	0.26	1467.
75	4.54	32.84	74	26.04	198.7	1.51	0.57	1467.
100	4.52	32.85	99	26.05	197.9	2.01	1.02	1468.
125	5.00	33.62	124	26.61	145.5	2.45	1.52	1471.
150	4.98	33.87	149	26.81	126.8	2.78	1.99	1472.
175	4.81	33.90	174	26.85	122.9	3.09	2.50	1472.
200	4.59	33.93	199	26.90	118.6	3.40	3.08	1471.
225	4.38	33.95	223	26.94	114.8	3.69	3.71	1471.
250	4.26	33.97	248	26.97	112.5	3.97	4.40	1471.



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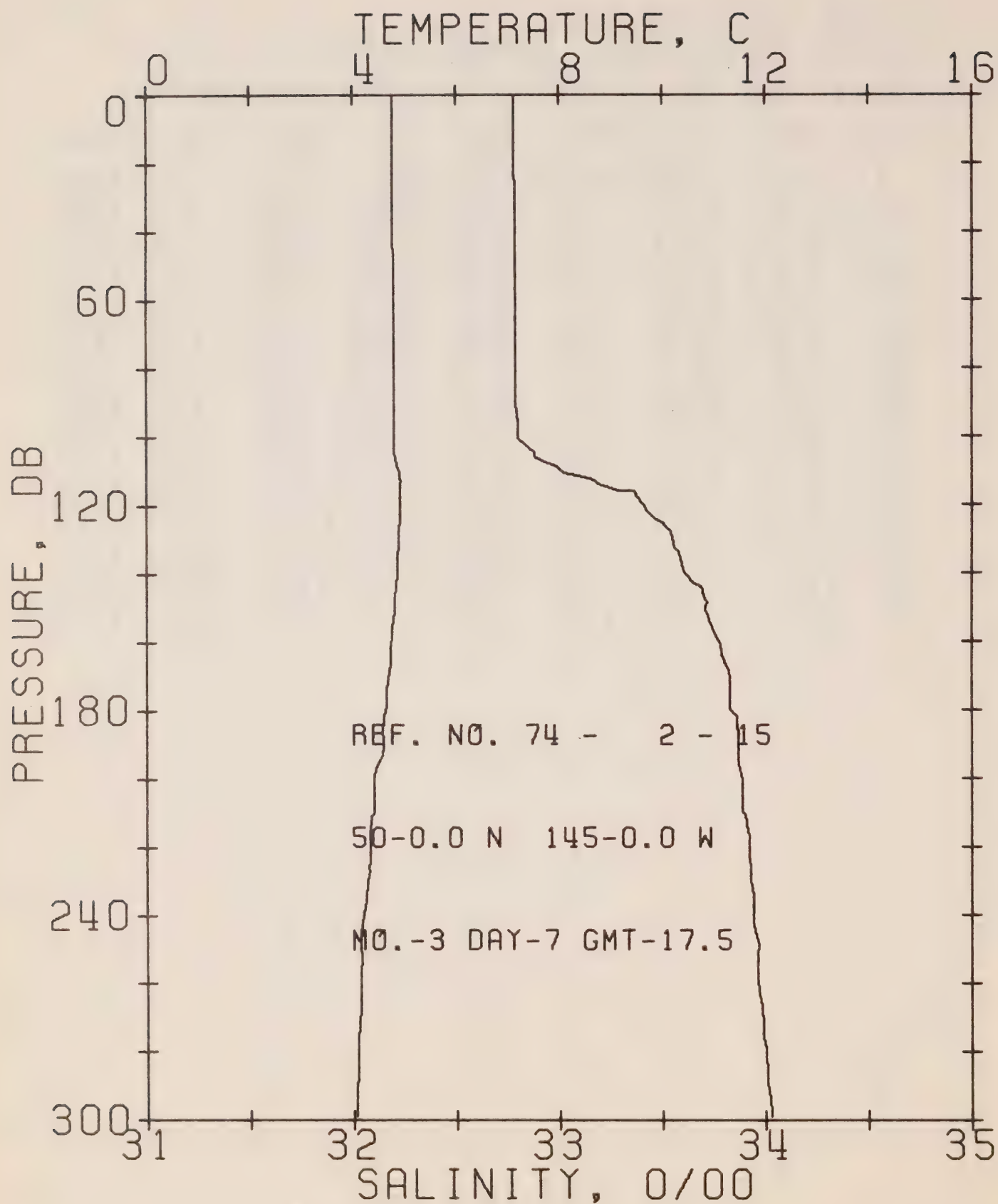
REFERENCE NO. 74- 2- 14

DATE 4/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 21.5

RESULTS OF STP CAST 157 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.81	32.73	0	25.92	208.9	0.0	0.0	1467.
10	4.80	32.73	10	25.92	209.0	0.21	0.01	1467.
20	4.80	32.73	20	25.92	209.1	0.42	0.04	1467.
30	4.79	32.73	30	25.93	209.1	0.63	0.10	1468.
50	4.80	32.73	50	25.92	209.4	1.05	0.27	1468.
75	4.62	32.75	75	25.96	205.9	1.57	0.60	1468.
100	4.62	32.82	99	26.02	201.2	2.08	1.05	1468.
125	4.94	33.62	124	26.61	144.9	2.49	1.53	1471.
150	4.56	33.75	149	26.76	131.2	2.83	2.00	1470.
175	4.45	33.80	174	26.81	126.6	3.15	2.54	1470.
200	4.28	33.84	199	26.86	122.0	3.47	3.13	1470.
225	4.15	33.88	223	26.91	117.9	3.77	3.78	1470.
250	4.06	33.91	248	26.94	115.0	4.06	4.48	1470.
300	3.94	33.99	298	27.01	108.1	4.62	6.06	1470.
400	3.80	34.08	397	27.10	100.5	5.67	9.80	1471.
500	3.67	34.19	496	27.20	91.9	6.63	14.19	1473.
600	3.48	34.24	595	27.26	87.1	7.53	19.23	1473.
800	3.16	34.35	793	27.38	76.6	9.16	30.84	1476.
1000	2.89	34.41	990	27.45	70.8	10.63	44.31	1478.
1200	2.64	34.47	1188	27.52	64.6	11.98	59.41	1480.



OFFSHORE OCEANOGRAPHY GROUP

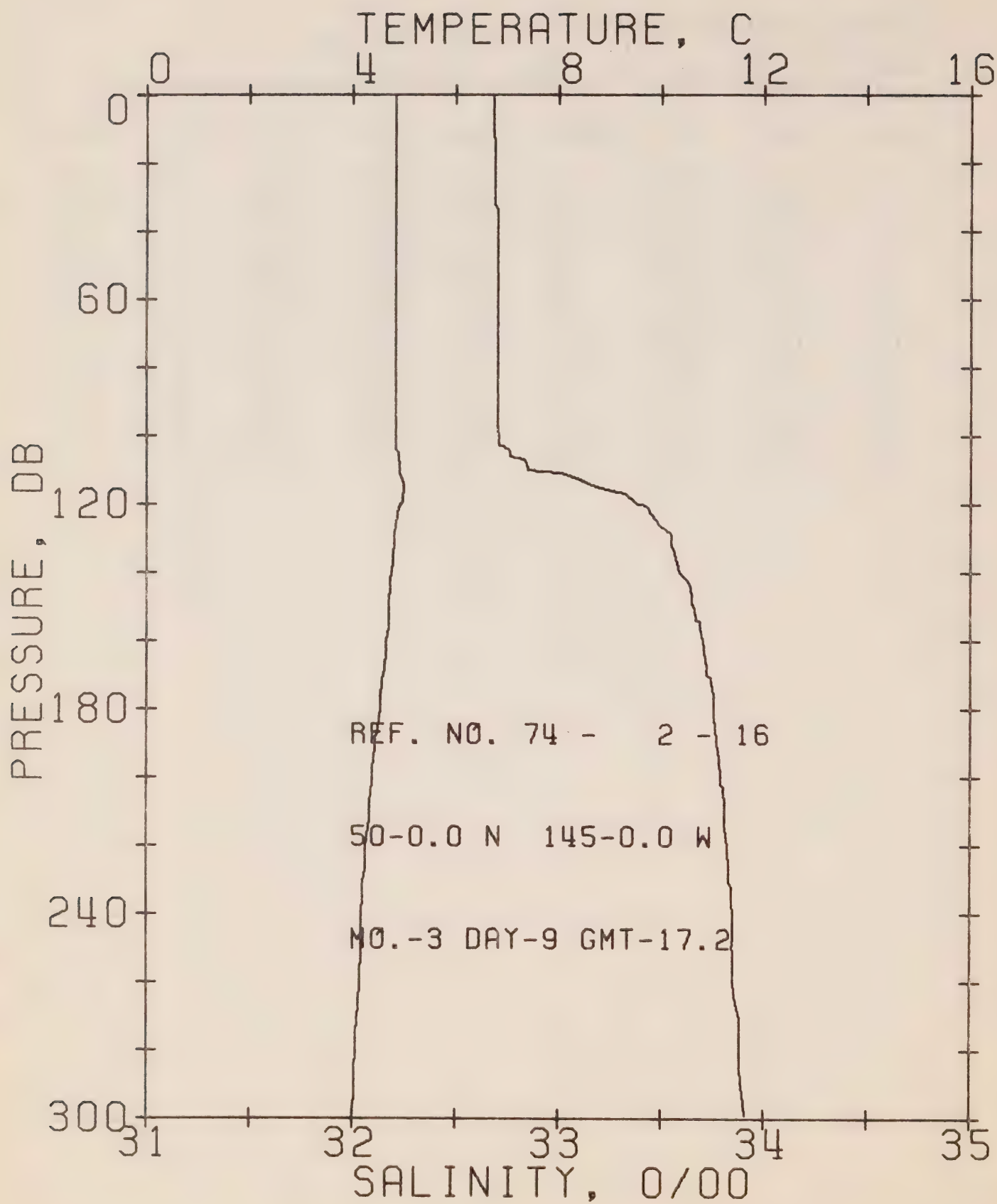
REFERENCE NO. 74- 2- 15

DATE 7/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 110 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.78	32.78	0	25.97	204.8	0.0	0.0	1467.
10	4.78	32.78	10	25.97	205.1	0.20	0.01	1467.
20	4.78	32.78	20	25.97	205.2	0.41	0.04	1467.
30	4.78	32.79	30	25.97	204.5	0.62	0.09	1468.
50	4.79	32.79	50	25.97	204.8	1.02	0.26	1468.
75	4.79	32.79	75	25.97	205.0	1.54	0.59	1468.
100	4.79	32.80	99	25.98	204.5	2.05	1.04	1469.
125	4.92	33.50	124	26.52	153.6	2.50	1.56	1471.
150	4.80	33.71	149	26.70	136.8	2.86	2.06	1471.
175	4.64	33.83	174	26.81	126.3	3.19	2.61	1471.
200	4.40	33.88	199	26.88	119.9	3.50	3.19	1470.
225	4.31	33.92	223	26.92	116.1	3.79	3.83	1470.
250	4.13	33.97	248	26.98	111.4	4.08	4.52	1470.



OFFSHORE OCEANOGRAPHY GROUP

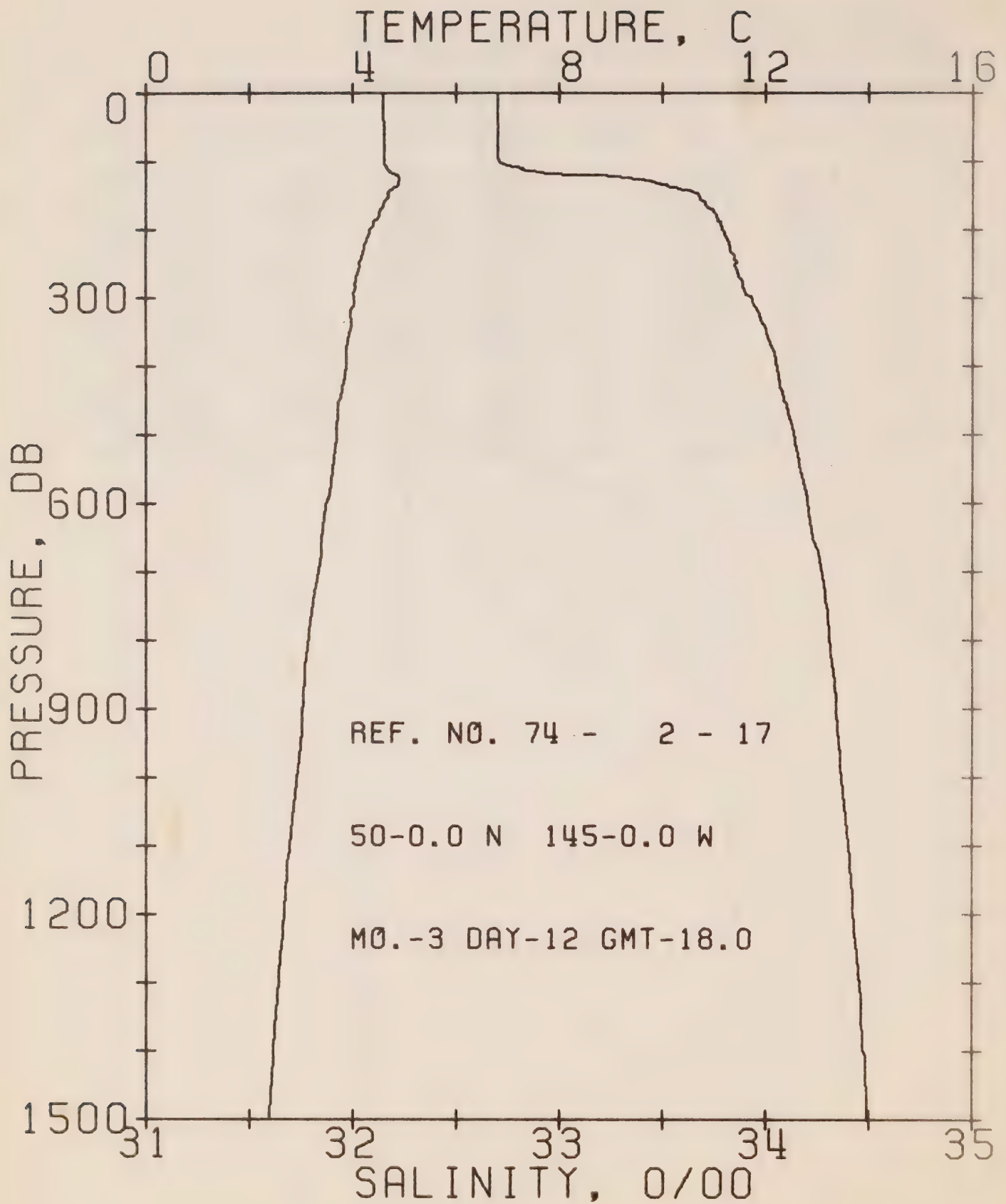
REFERENCE NO. 74- 2- 16

DATE 9/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.2

RESULTS OF STP CAST 93 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.82	32.68	0	25.88	212.7	0.0	0.0	1467.
10	4.82	32.68	10	25.88	212.9	0.21	0.01	1467.
20	4.82	32.69	20	25.89	212.4	0.43	0.04	1468.
30	4.82	32.69	30	25.89	212.5	0.64	0.10	1468.
50	4.83	32.70	50	25.90	212.0	1.06	0.27	1468.
75	4.83	32.70	75	25.90	212.2	1.59	0.61	1468.
100	4.83	32.71	99	25.91	211.6	2.12	1.08	1469.
125	4.85	33.48	124	26.51	154.6	2.59	1.61	1470.
150	4.69	33.65	149	26.67	139.8	2.95	2.12	1470.
175	4.54	33.75	174	26.76	131.5	3.29	2.68	1470.
200	4.37	33.79	199	26.81	126.7	3.61	3.30	1470.
225	4.24	33.83	223	26.85	122.8	3.92	3.97	1470.
250	4.16	33.84	248	26.87	121.2	4.23	4.71	1470.



OFFSHORE OCEANOGRAPHY GROUP

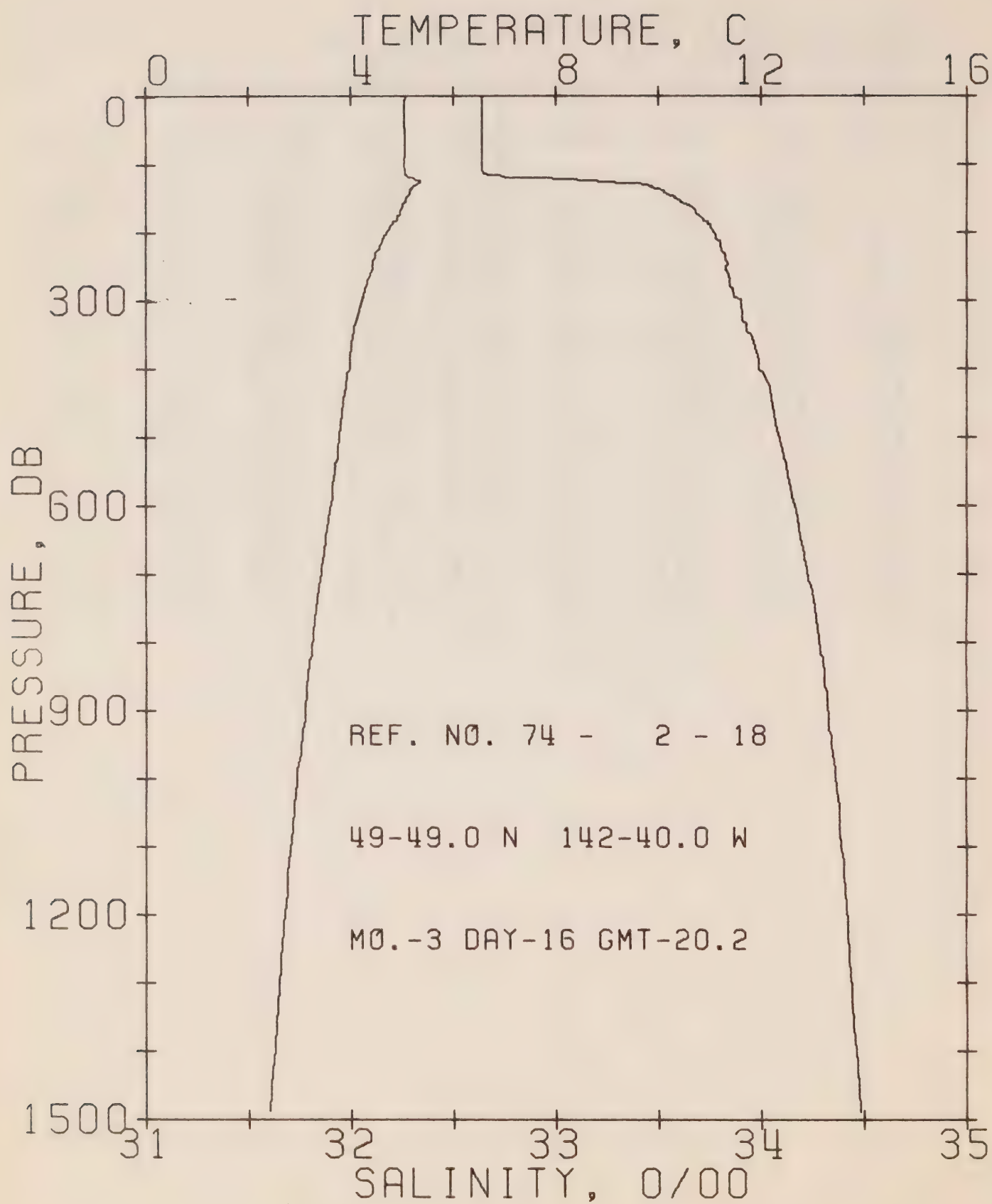
REFERENCE NO. 74- 2- 17

DATE 12/ 3/74

POSITION 50- 0.0N. 145- 0.0W GMT 18.0

RESULTS OF STP CAST 145 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.60	32.70	0	25.92	209.0	0.0	0.0	1466.
10	4.60	32.70	10	25.92	209.3	0.21	0.01	1466.
20	4.60	32.70	20	25.92	209.4	0.42	0.04	1467.
30	4.60	32.70	30	25.92	209.5	0.63	0.10	1467.
50	4.61	32.70	50	25.92	209.7	1.05	0.27	1467.
75	4.61	32.70	75	25.92	209.9	1.57	0.60	1468.
100	4.62	32.71	99	25.93	209.5	2.10	1.07	1468.
125	4.91	33.38	124	26.43	162.5	2.58	1.63	1471.
150	4.68	33.68	149	26.69	138.1	2.95	2.14	1470.
175	4.51	33.75	174	26.76	131.1	3.29	2.70	1470.
200	4.33	33.79	199	26.82	126.3	3.61	3.32	1470.
225	4.21	33.83	223	26.86	122.2	3.92	3.99	1470.
250	4.11	33.85	248	26.89	119.6	4.23	4.72	1470.
300	4.03	33.93	298	26.96	113.5	4.81	6.36	1470.
400	3.87	34.05	397	27.07	103.4	5.89	10.20	1472.
500	3.68	34.14	496	27.16	96.0	6.89	14.76	1472.
600	3.48	34.20	595	27.23	89.8	7.82	19.98	1473.
800	3.13	34.31	793	27.35	79.3	9.50	31.96	1475.
1000	2.92	34.37	990	27.41	74.3	11.04	46.01	1478.
1200	2.66	34.42	1188	27.48	68.4	12.45	61.88	1480.



OFFSHORE OCEANOGRAPHY GROUP

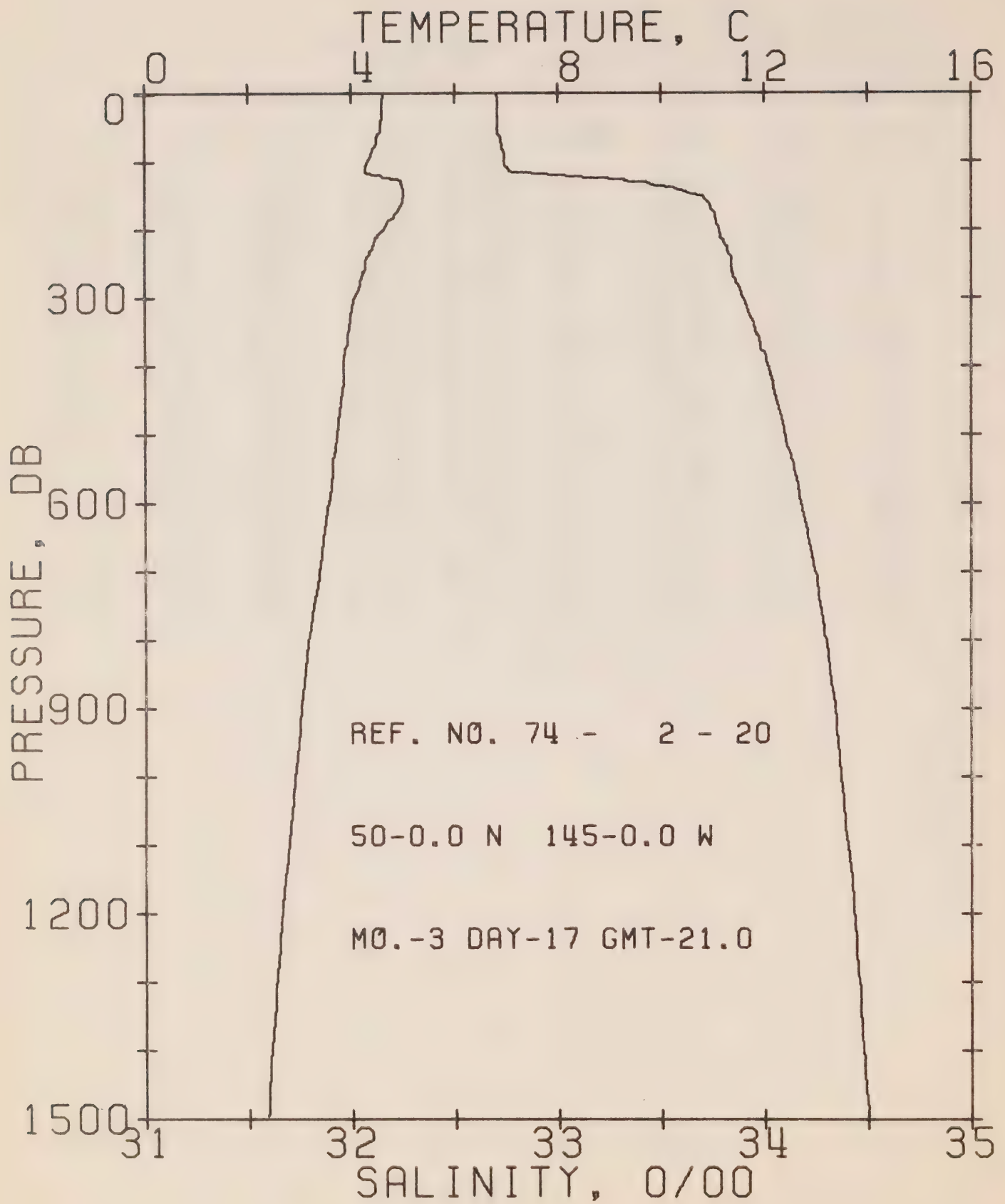
REFERENCE NO. 74- 2- 13

DATE 16/ 3/74

POSITION 49-49.0N, 142-40.0W GMT 20.2

RESULTS OF STP CAST 156 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.06	32.64	0	25.82	218.2	0.0	0.0	1468.
10	5.05	32.64	10	25.83	218.5	0.22	0.01	1468.
20	5.05	32.64	20	25.83	218.6	0.44	0.04	1468.
30	5.05	32.64	30	25.83	218.6	0.66	0.10	1469.
50	5.06	32.64	50	25.83	218.9	1.09	0.28	1469.
75	5.06	32.64	75	25.82	219.1	1.64	0.63	1469.
100	5.05	32.64	99	25.83	219.3	2.19	1.12	1470.
125	5.37	33.23	124	26.26	178.8	2.72	1.72	1472.
150	5.09	33.58	149	26.56	149.8	3.11	2.27	1472.
175	4.93	33.70	174	26.68	139.2	3.47	2.87	1472.
200	4.69	33.77	199	26.76	131.6	3.81	3.51	1471.
225	4.55	33.81	223	26.81	127.4	4.13	4.21	1471.
250	4.42	33.83	248	26.84	124.7	4.45	4.97	1471.
300	4.20	33.89	298	26.91	118.3	5.06	6.68	1471.
400	3.97	33.99	397	27.01	109.2	6.19	10.70	1472.
500	3.76	34.08	496	27.11	100.7	7.23	15.46	1473.
600	3.58	34.16	595	27.19	93.8	8.20	20.92	1474.
800	3.23	34.29	793	27.32	82.4	9.96	33.41	1476.
1000	2.93	34.36	990	27.41	74.9	11.53	47.79	1478.
1200	2.69	34.42	1188	27.47	69.2	12.96	63.87	1480.



OFFSHORE OCEANOGRAPHY GROUP

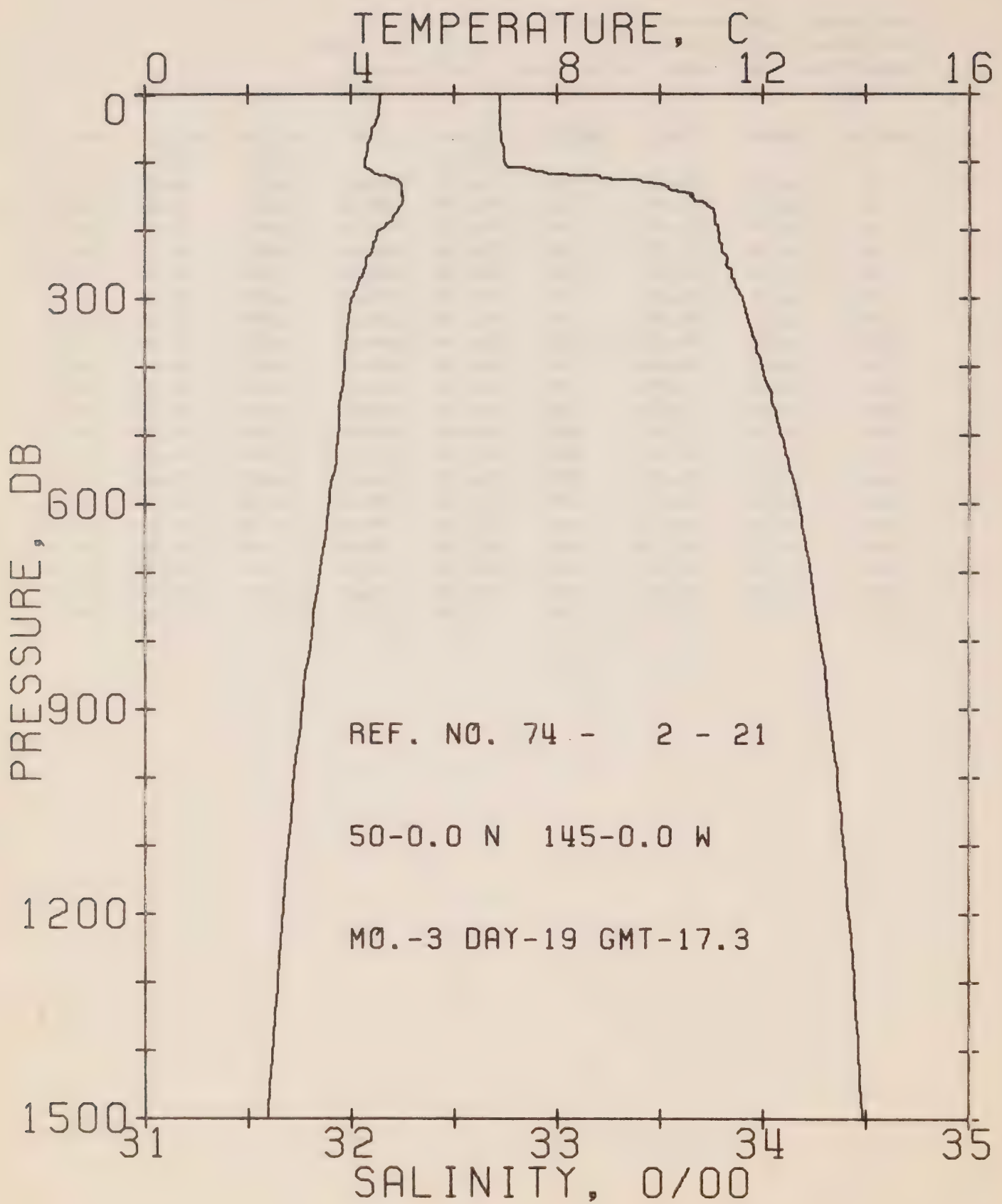
REFERENCE NO. 74- 2- 20

DATE 17/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 21.0

RESULTS OF STP CAST 148 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.61	32.70	0	25.92	209.1	0.0	0.0	1466.
10	4.60	32.71	10	25.93	208.6	0.21	0.01	1466.
20	4.59	32.71	20	25.93	208.5	0.42	0.04	1467.
30	4.58	32.71	30	25.93	208.6	0.63	0.10	1467.
50	4.56	32.71	50	25.93	208.4	1.04	0.27	1467.
75	4.46	32.73	75	25.96	206.3	1.56	0.60	1467.
100	4.31	32.74	99	25.98	204.1	2.07	1.05	1467.
125	4.82	33.28	124	26.36	169.0	2.56	1.61	1470.
150	5.00	33.68	149	26.66	141.1	2.95	2.15	1472.
175	4.86	33.76	174	26.73	134.2	3.29	2.72	1472.
200	4.61	33.78	199	26.78	130.0	3.62	3.35	1471.
225	4.39	33.82	223	26.83	124.9	3.94	4.04	1471.
250	4.27	33.84	248	26.86	122.4	4.25	4.78	1471.
300	4.04	33.90	298	26.93	116.1	4.85	6.46	1470.
400	3.84	34.02	397	27.05	105.9	5.95	10.40	1471.
500	3.71	34.10	496	27.12	99.1	6.98	15.10	1473.
600	3.53	34.18	595	27.20	92.3	7.93	20.45	1474.
800	3.16	34.30	793	27.34	80.7	9.66	32.72	1475.
1000	2.89	34.37	990	27.42	73.7	11.20	46.80	1478.
1200	2.64	34.43	1188	27.49	67.6	12.61	62.58	1480.



OFFSHORE OCEANOGRAPHY GROUP

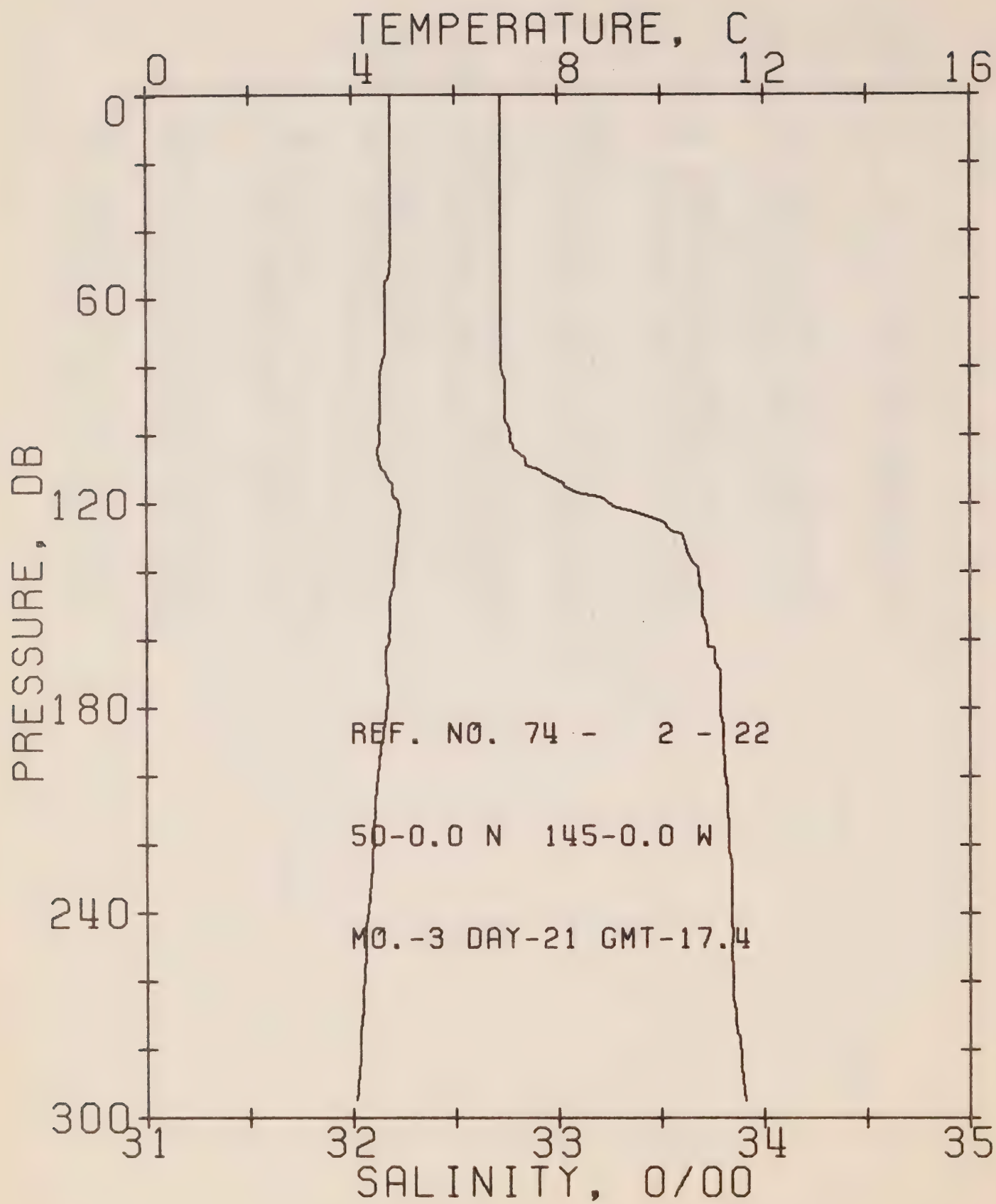
REFERENCE NO. 74- 2- 21

DATE 19/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.56	32.72	0	25.94	207.1	0.0	0.0	1466.
10	4.55	32.72	10	25.94	207.3	0.21	0.01	1466.
20	4.54	32.72	20	25.94	207.2	0.41	0.04	1466.
30	4.53	32.72	30	25.95	207.2	0.62	0.10	1466.
50	4.41	32.72	50	25.96	206.2	1.04	0.26	1466.
75	4.33	32.73	75	25.98	204.4	1.55	0.59	1466.
100	4.26	32.74	99	25.99	203.4	2.06	1.05	1467.
125	4.87	33.26	124	26.34	171.1	2.54	1.59	1470.
150	5.00	33.65	149	26.63	143.5	2.92	2.12	1472.
175	4.85	33.77	174	26.74	133.1	3.26	2.69	1472.
200	4.55	33.78	199	26.78	129.4	3.59	3.32	1471.
225	4.41	33.80	223	26.81	126.6	3.91	4.02	1471.
250	4.29	33.82	248	26.85	123.6	4.22	4.77	1471.
300	4.00	33.90	298	26.94	115.4	4.82	6.45	1470.
400	3.85	34.00	397	27.03	107.6	5.94	10.42	1471.
500	3.74	34.09	496	27.11	100.4	6.97	15.17	1473.
600	3.55	34.17	595	27.20	92.8	7.94	20.58	1474.
800	3.20	34.28	793	27.31	82.8	9.69	33.04	1476.
1000	2.88	34.36	990	27.41	74.3	11.26	47.36	1478.
1200	2.65	34.41	1188	27.47	68.9	12.69	63.39	1480.



OFFSHORE OCEANOGRAPHY GROUP

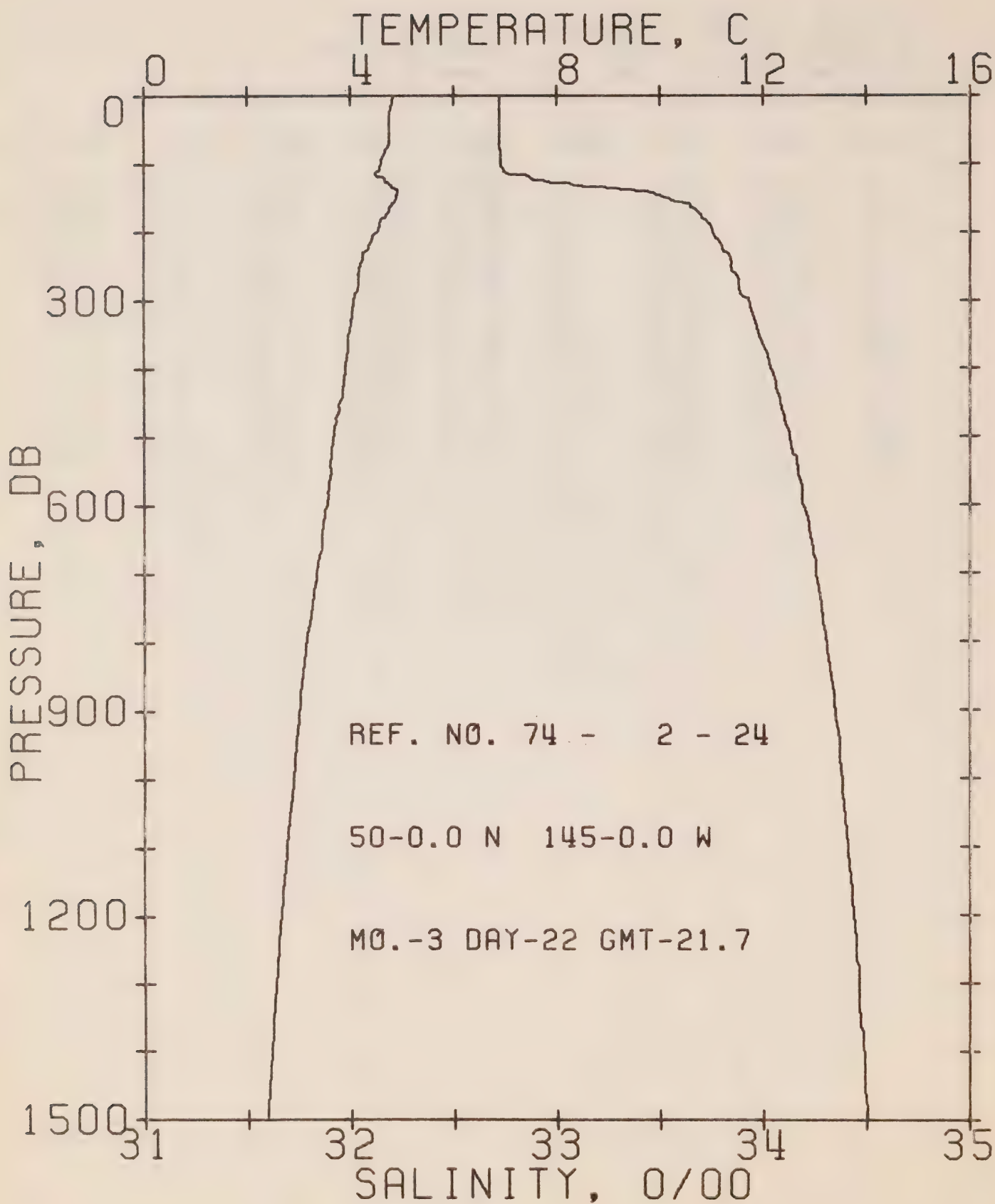
REFERENCE NO. 74- 2- 22

DATE 21/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.4

RESULTS OF STP CAST 100 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.75	32.72	0	25.92	209.0	0.0	0.0	1467.
10	4.75	32.72	10	25.92	209.3	0.21	0.01	1467.
20	4.75	32.72	20	25.92	209.5	0.42	0.04	1467.
30	4.76	32.72	30	25.92	209.6	0.63	0.10	1467.
50	4.74	32.72	50	25.92	209.6	1.05	0.27	1468.
75	4.63	32.72	75	25.94	208.6	1.57	0.60	1468.
100	4.53	32.77	99	25.99	204.0	2.09	1.06	1468.
125	4.90	33.51	124	26.53	152.7	2.55	1.59	1471.
150	4.72	33.70	149	26.70	136.7	2.91	2.09	1471.
175	4.68	33.79	174	26.78	129.7	3.24	2.64	1471.
200	4.48	33.81	199	26.82	126.2	3.56	3.25	1471.
225	4.37	33.84	223	26.85	123.2	3.87	3.93	1471.
250	4.24	33.84	248	26.87	121.8	4.18	4.67	1470.



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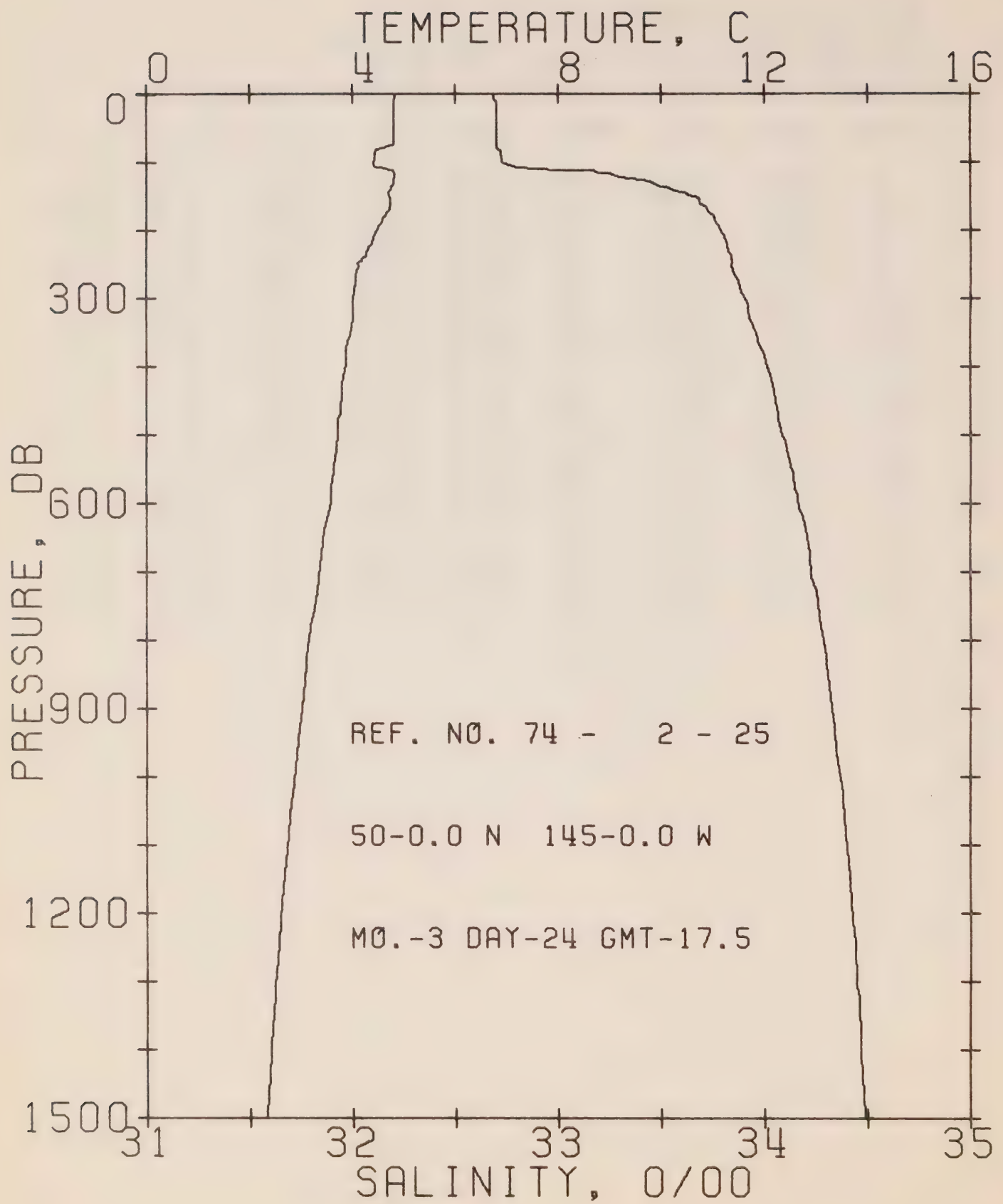
REFERENCE NO. 74- 2- 24

DATE 22/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 21.7

RESULTS OF STP CAST 202 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.82	32.72	0	25.91	209.7	0.0	0.0	1467.
10	4.80	32.72	10	25.92	209.9	0.21	0.01	1467.
20	4.77	32.72	20	25.92	209.7	0.42	0.04	1467.
30	4.75	32.72	30	25.92	209.5	0.63	0.10	1467.
50	4.75	32.72	50	25.92	209.6	1.05	0.27	1468.
75	4.72	32.72	75	25.93	209.6	1.57	0.60	1468.
100	4.58	32.73	99	25.95	207.6	2.09	1.07	1468.
125	4.67	32.95	124	26.11	192.2	2.60	1.65	1469.
150	4.88	33.52	149	26.54	151.9	3.02	2.23	1471.
175	4.69	33.70	174	26.70	136.7	3.38	2.82	1471.
200	4.50	33.75	199	26.76	131.1	3.71	3.46	1471.
225	4.31	33.80	223	26.83	125.5	4.03	4.15	1470.
250	4.17	33.84	248	26.87	121.1	4.34	4.89	1470.
300	4.06	33.93	298	26.95	113.8	4.93	6.55	1471.
400	3.89	34.03	397	27.05	105.1	6.02	10.45	1472.
500	3.66	34.13	496	27.15	96.3	7.03	15.07	1472.
600	3.53	34.19	595	27.22	91.1	7.97	20.30	1474.
800	3.14	34.31	793	27.34	80.0	9.67	32.40	1475.
1000	2.88	34.38	990	27.43	72.9	11.19	46.32	1478.
1200	2.63	34.44	1188	27.49	67.2	12.59	62.00	1480.



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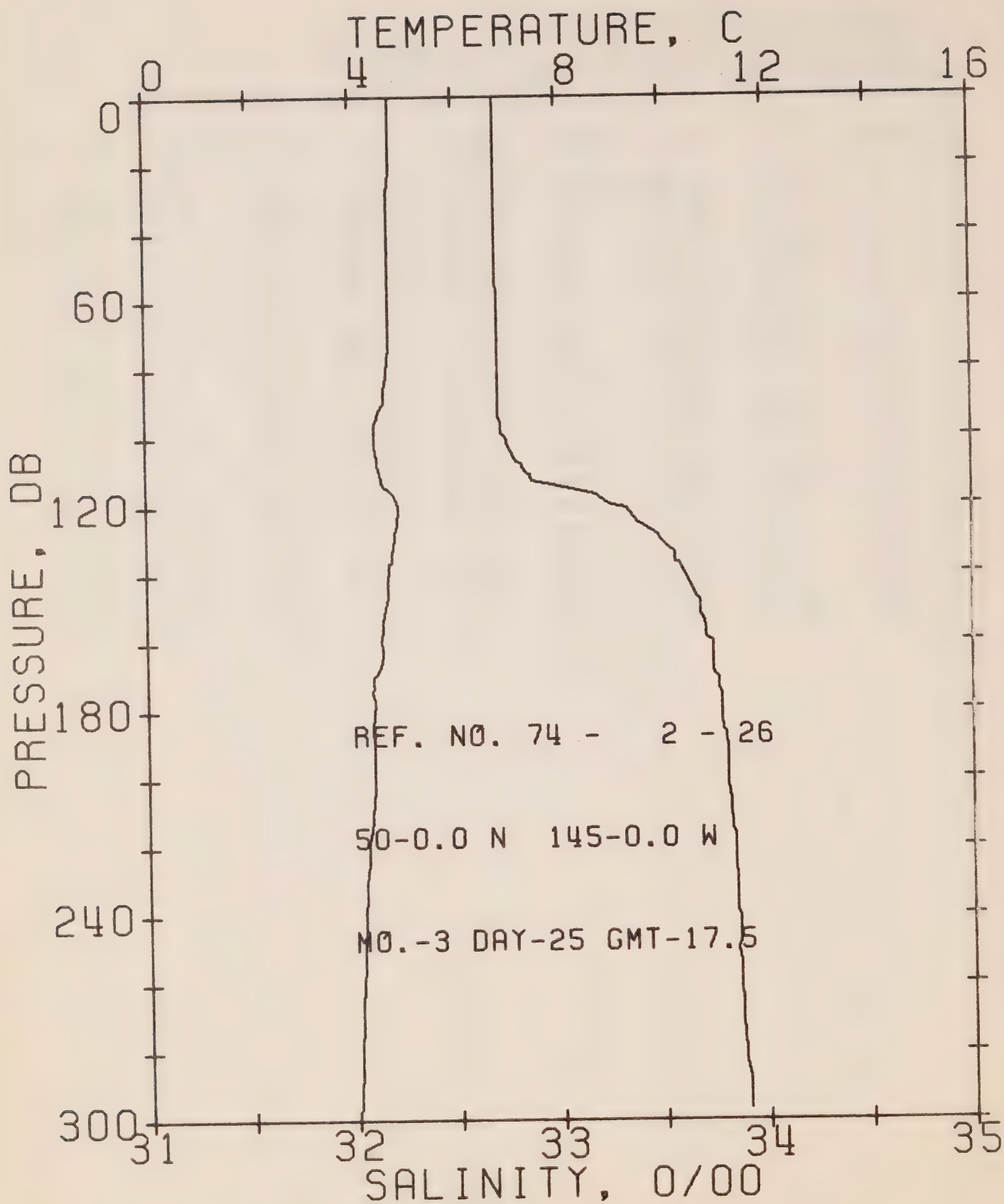
REFERENCE NO. 74- 2- 25

DATE 24/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 146 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.83	32.69	0	25.89	212.1	0.0	0.0	1467.
10	4.81	32.70	10	25.90	211.4	0.21	0.01	1467.
20	4.81	32.70	20	25.90	211.5	0.42	0.04	1467.
30	4.80	32.70	30	25.90	211.5	0.63	0.10	1468.
50	4.81	32.70	50	25.90	211.7	1.06	0.27	1468.
75	4.78	32.70	75	25.90	211.7	1.59	0.61	1468.
100	4.41	32.73	99	25.97	205.8	2.11	1.07	1467.
125	4.80	33.38	124	26.44	161.3	2.57	1.60	1470.
150	4.73	33.67	149	26.68	139.1	2.94	2.12	1471.
175	4.66	33.74	174	26.74	133.3	3.28	2.68	1471.
200	4.49	33.79	199	26.80	128.0	3.61	3.31	1471.
225	4.33	33.82	223	26.84	124.2	3.92	3.99	1470.
250	4.11	33.84	248	26.88	120.4	4.23	4.72	1470.
300	4.01	33.91	298	26.94	115.1	4.82	6.38	1470.
400	3.85	34.02	397	27.04	106.0	5.93	10.32	1471.
500	3.71	34.09	496	27.12	99.7	6.95	15.03	1473.
600	3.55	34.16	595	27.19	93.4	7.91	20.42	1474.
800	3.15	34.29	793	27.33	81.3	9.65	32.77	1475.
1000	2.85	34.37	990	27.42	73.5	11.20	46.93	1478.
1200	2.60	34.43	1188	27.49	67.4	12.60	62.67	1480.



OFFSHORE OCEANOGRAPHY GROUP

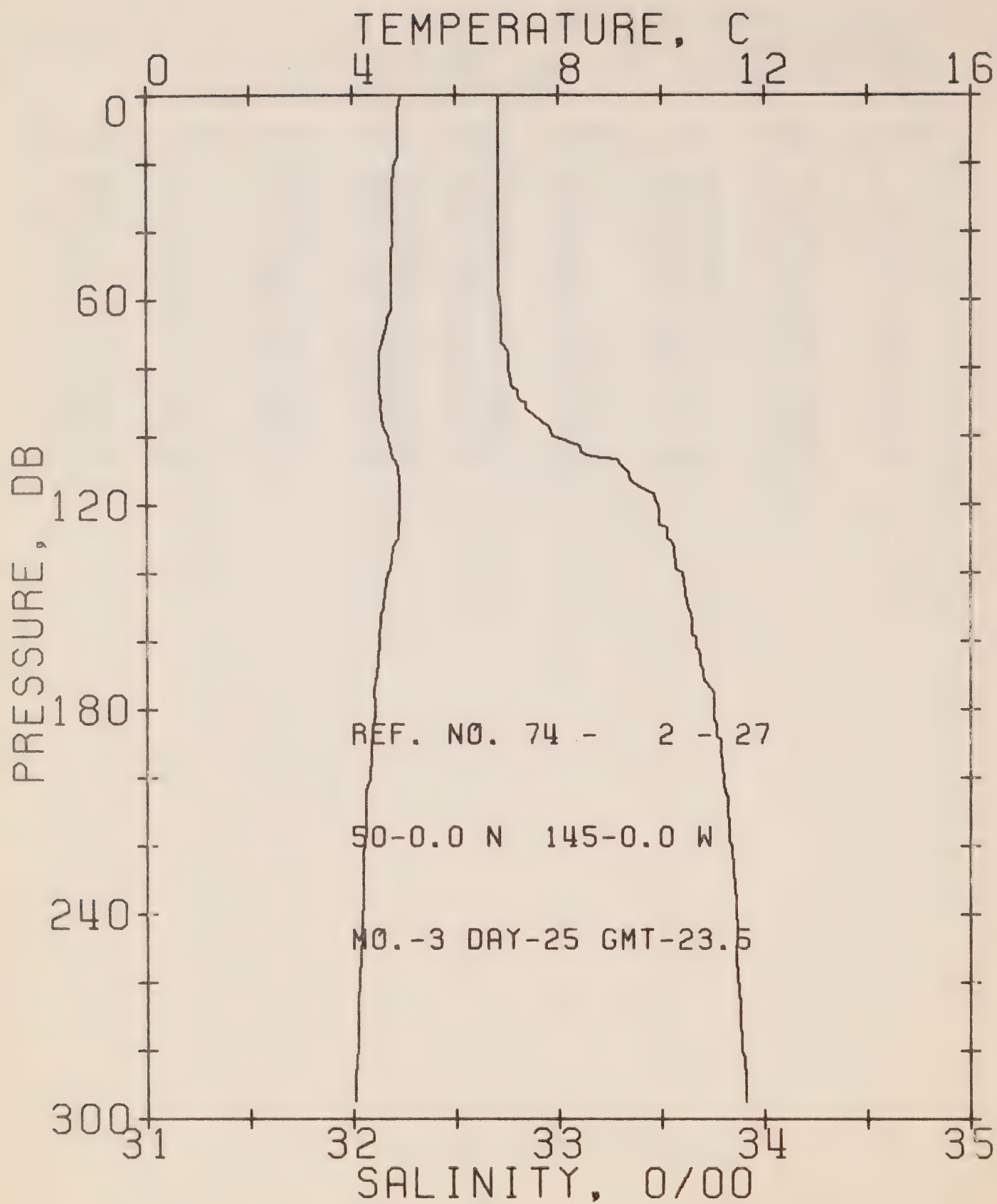
REFERENCE NO. 74- 2- 26

DATE 25/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 108 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.78	32.70	0	25.90	210.8	0.0	0.0	1467.
10	4.78	32.70	10	25.90	211.1	0.21	0.01	1467.
20	4.77	32.70	20	25.90	211.1	0.42	0.04	1467.
30	4.72	32.70	30	25.91	210.6	0.63	0.10	1467.
50	4.71	32.70	50	25.91	210.6	1.05	0.27	1468.
75	4.70	32.71	75	25.92	210.1	1.58	0.60	1468.
100	4.42	32.74	99	25.97	205.2	2.10	1.07	1467.
125	4.85	33.38	124	26.43	161.9	2.57	1.61	1470.
150	4.62	33.68	149	26.70	137.1	2.94	2.12	1470.
175	4.34	33.78	174	26.81	126.9	3.27	2.67	1469.
200	4.37	33.81	199	26.83	125.2	3.59	3.27	1470.
225	4.23	33.84	223	26.87	121.6	3.89	3.94	1470.
250	4.13	33.85	248	26.88	120.1	4.19	4.66	1470.



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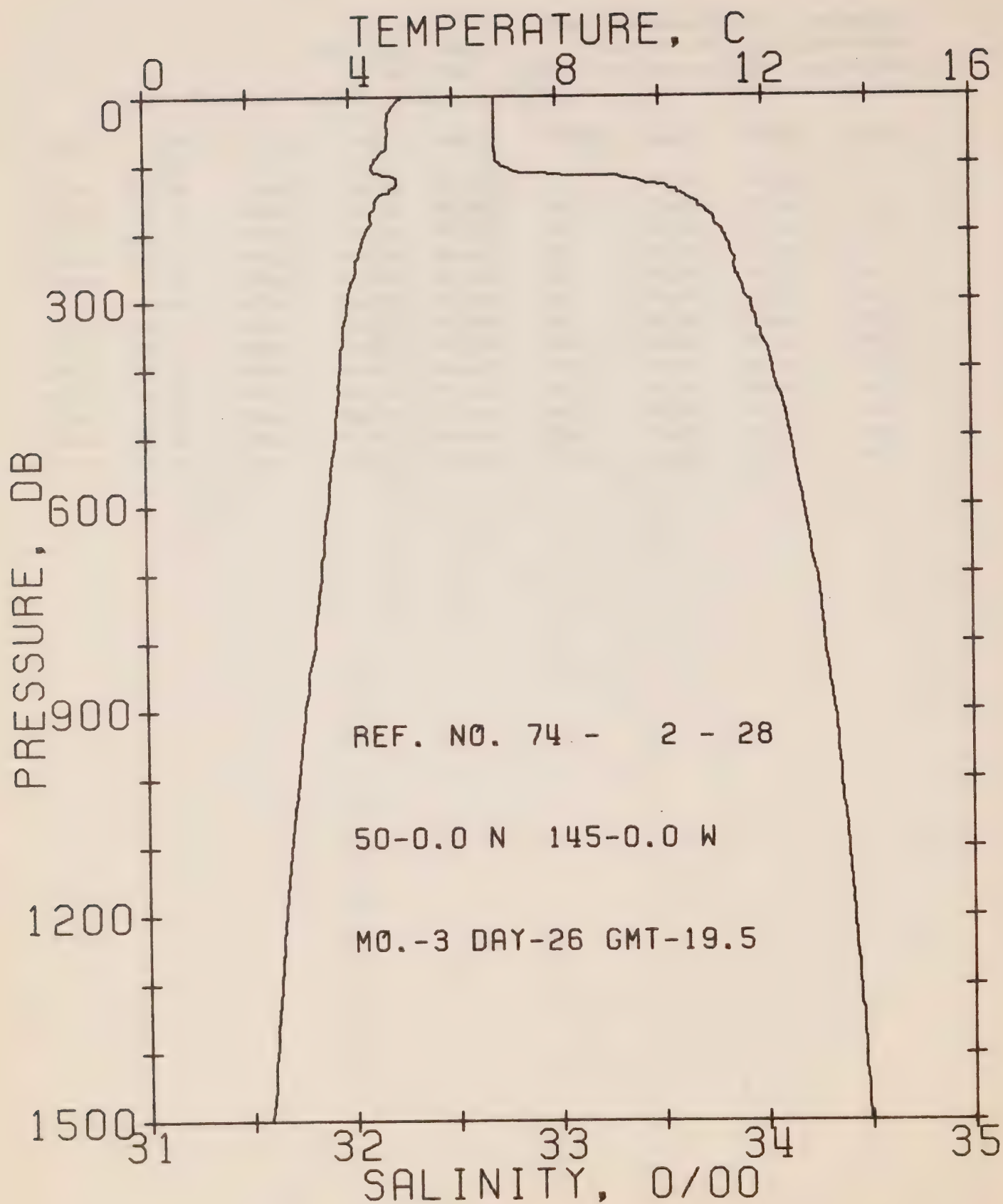
REFERENCE NO. 74- 2- 27

DATE 25/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 23.5

RESULTS OF STP CAST 118 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.94	32.71	0	25.89	211.7	0.0	0.0	1468.
10	4.88	32.71	10	25.90	211.4	0.21	0.01	1468.
20	4.84	32.71	20	25.90	211.1	0.42	0.04	1468.
30	4.77	32.71	30	25.91	210.5	0.63	0.10	1467.
50	4.76	32.71	50	25.91	210.5	1.05	0.27	1468.
75	4.50	32.75	75	25.97	205.0	1.58	0.60	1467.
100	4.68	32.97	99	26.13	190.6	2.08	1.05	1469.
125	4.89	33.49	124	26.52	154.0	2.49	1.52	1471.
150	4.60	33.63	149	26.66	140.6	2.86	2.03	1470.
175	4.41	33.75	174	26.77	129.9	3.20	2.60	1470.
200	4.33	33.80	199	26.82	125.7	3.52	3.21	1470.
225	4.19	33.85	223	26.87	120.9	3.83	3.87	1470.
250	4.15	33.86	248	26.89	119.3	4.13	4.60	1470.



OFFSHORE OCEANOGRAPHY GROUP

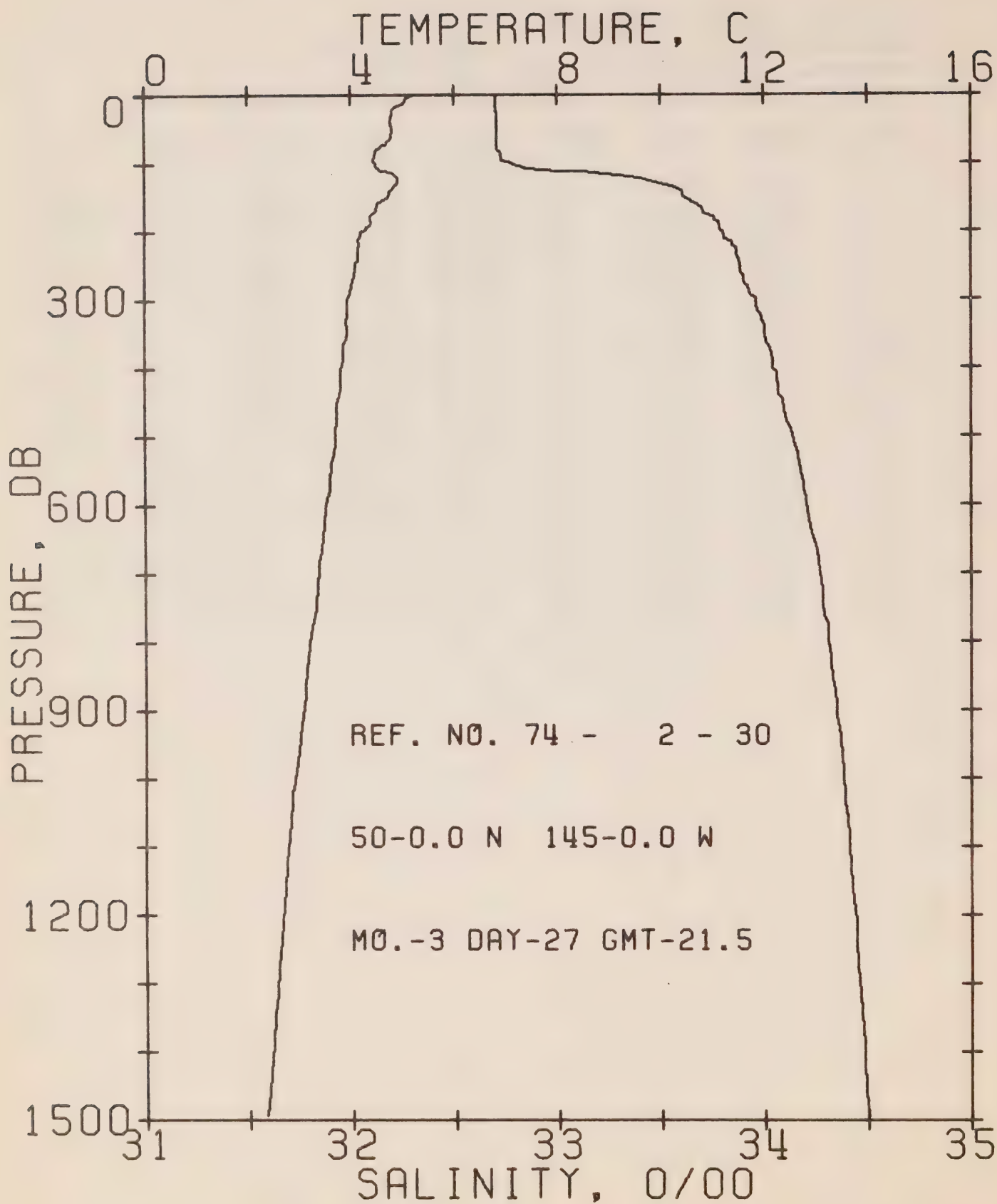
REFERENCE NO. 74- 2- 28

DATE 26/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 19.5

RESULTS OF STP CAST 184 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.95	32.70	0	25.88	212.6	0.0	0.0	1468.
10	4.89	32.70	10	25.89	212.3	0.21	0.01	1468.
20	4.79	32.70	20	25.90	211.3	0.42	0.04	1467.
30	4.75	32.70	30	25.91	210.9	0.64	0.10	1467.
50	4.74	32.70	50	25.91	211.0	1.06	0.27	1468.
75	4.71	32.70	75	25.91	210.9	1.58	0.60	1468.
100	4.43	32.73	99	25.96	206.0	2.11	1.07	1467.
125	4.91	33.42	124	26.46	159.6	2.57	1.60	1471.
150	4.50	33.65	149	26.69	138.1	2.94	2.12	1470.
175	4.40	33.75	174	26.78	129.6	3.27	2.67	1470.
200	4.29	33.81	199	26.83	124.4	3.59	3.28	1470.
225	4.18	33.84	223	26.87	121.1	3.90	3.94	1470.
250	4.10	33.86	248	26.90	119.0	4.20	4.66	1470.
300	3.95	33.94	298	26.97	112.0	4.78	6.29	1470.
400	3.78	34.04	397	27.07	103.5	5.85	10.11	1471.
500	3.66	34.12	496	27.15	96.7	6.85	14.69	1472.
600	3.52	34.19	595	27.21	91.5	7.79	19.95	1474.
800	3.24	34.29	793	27.32	82.3	9.52	32.26	1476.
1000	2.90	34.36	990	27.41	74.5	11.08	46.51	1478.
1200	2.63	34.42	1188	27.48	68.2	12.50	62.45	1480.



OFFSHORE OCEANOGRAPHY GROUP

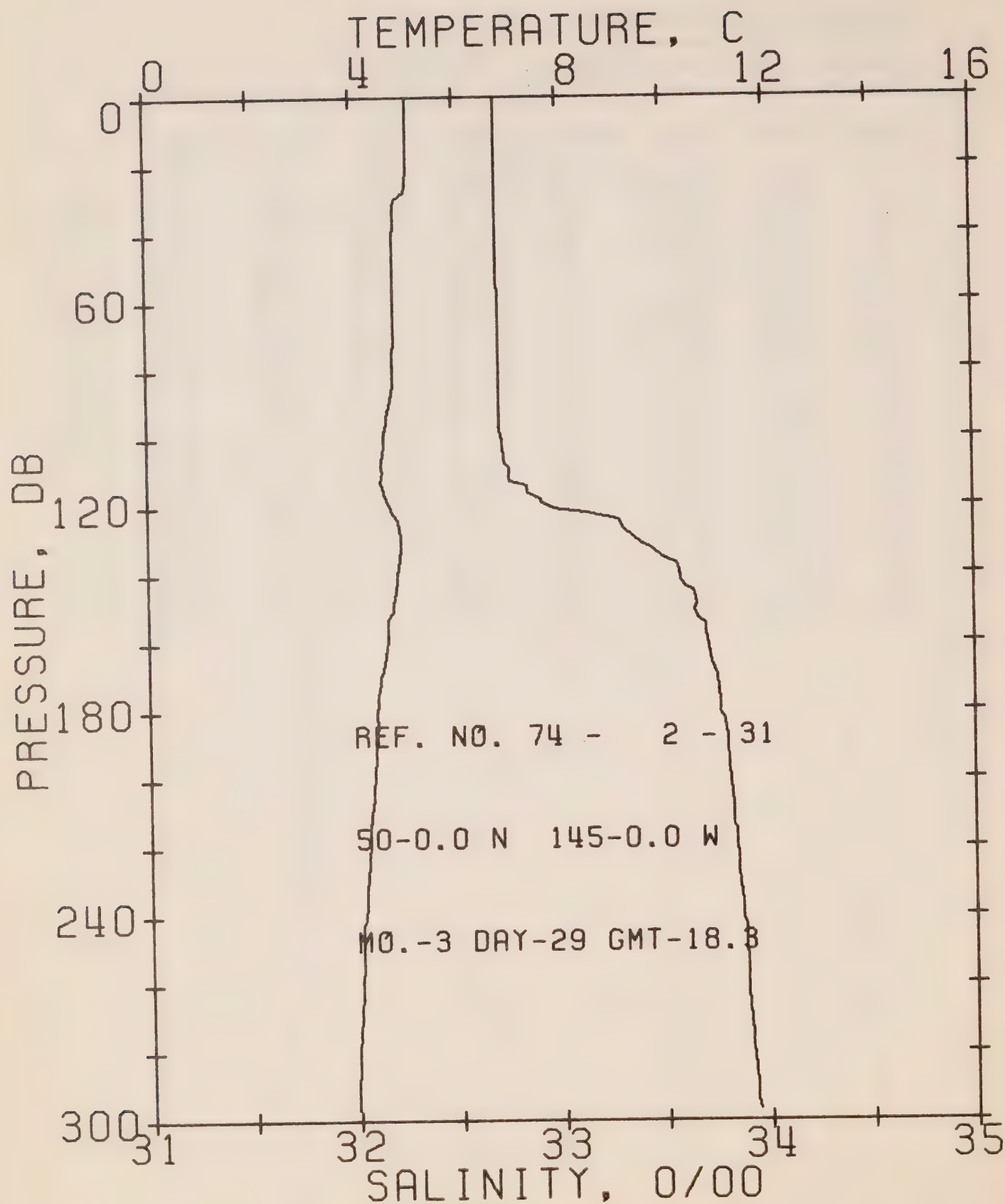
REFERENCE NO. 74- 2- 30

DATE 27/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 21.5

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.12	32.70	0	25.87	214.4	0.0	0.0	1468.
10	5.03	32.70	10	25.88	213.8	0.21	0.01	1468.
20	4.83	32.70	20	25.90	211.8	0.43	0.04	1468.
30	4.78	32.71	30	25.91	210.6	0.64	0.10	1468.
50	4.79	32.71	50	25.91	210.8	1.06	0.27	1468.
75	4.58	32.71	75	25.93	208.8	1.59	0.60	1467.
100	4.47	32.78	99	26.00	202.7	2.10	1.06	1467.
125	4.90	33.44	124	26.48	157.6	2.56	1.58	1471.
150	4.72	33.61	149	26.63	143.5	2.93	2.10	1470.
175	4.41	33.72	174	26.75	132.0	3.27	2.66	1470.
200	4.23	33.80	199	26.83	124.5	3.59	3.27	1469.
225	4.13	33.87	223	26.90	118.4	3.89	3.93	1470.
250	4.08	33.88	248	26.91	117.4	4.19	4.65	1470.
300	3.93	33.96	298	26.99	110.2	4.76	6.25	1470.
400	3.80	34.04	397	27.07	103.8	5.83	10.06	1471.
500	3.68	34.14	496	27.16	96.1	6.83	14.63	1473.
600	3.50	34.20	595	27.23	90.0	7.76	19.83	1473.
800	3.17	34.31	793	27.34	79.8	9.45	31.88	1475.
1000	2.89	34.38	990	27.43	72.9	10.97	45.83	1478.
1200	2.66	34.44	1188	27.49	67.3	12.37	61.52	1480.



OFFSHORE OCEANOGRAPHY GROUP

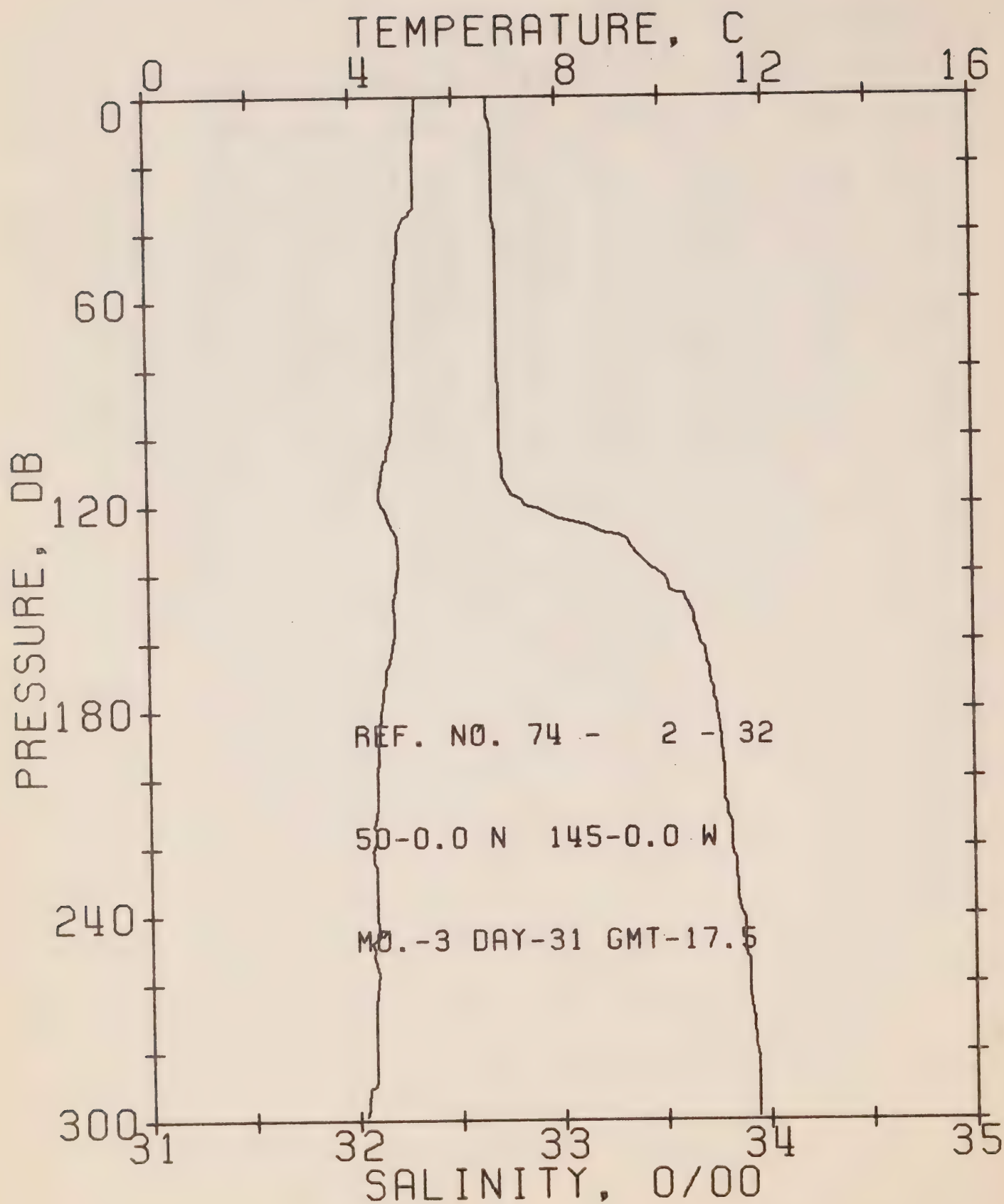
REFERENCE NO. 74- 2- 31

DATE 29/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 18.3

RESULTS OF STP CAST 94 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.09	32.70	0	25.87	214.1	0.0	0.0	1468.
10	5.09	32.70	10	25.87	214.4	0.21	0.01	1468.
20	5.09	32.70	20	25.87	214.5	0.43	0.04	1469.
30	4.86	32.70	30	25.89	212.1	0.64	0.10	1468.
50	4.81	32.70	50	25.90	211.7	1.07	0.27	1468.
75	4.78	32.71	75	25.91	210.9	1.59	0.61	1468.
100	4.59	32.72	99	25.94	208.7	2.12	1.08	1468.
125	4.87	33.29	124	26.36	168.8	2.62	1.64	1470.
150	4.75	33.65	149	26.66	140.4	3.00	2.18	1471.
175	4.42	33.76	174	26.78	129.3	3.33	2.73	1470.
200	4.34	33.81	199	26.83	124.6	3.65	3.34	1470.
225	4.21	33.85	223	26.87	120.9	3.96	4.00	1470.
250	4.08	33.88	248	26.91	117.4	4.25	4.72	1470.



OFFSHORE OCEANOGRAPHY GROUP

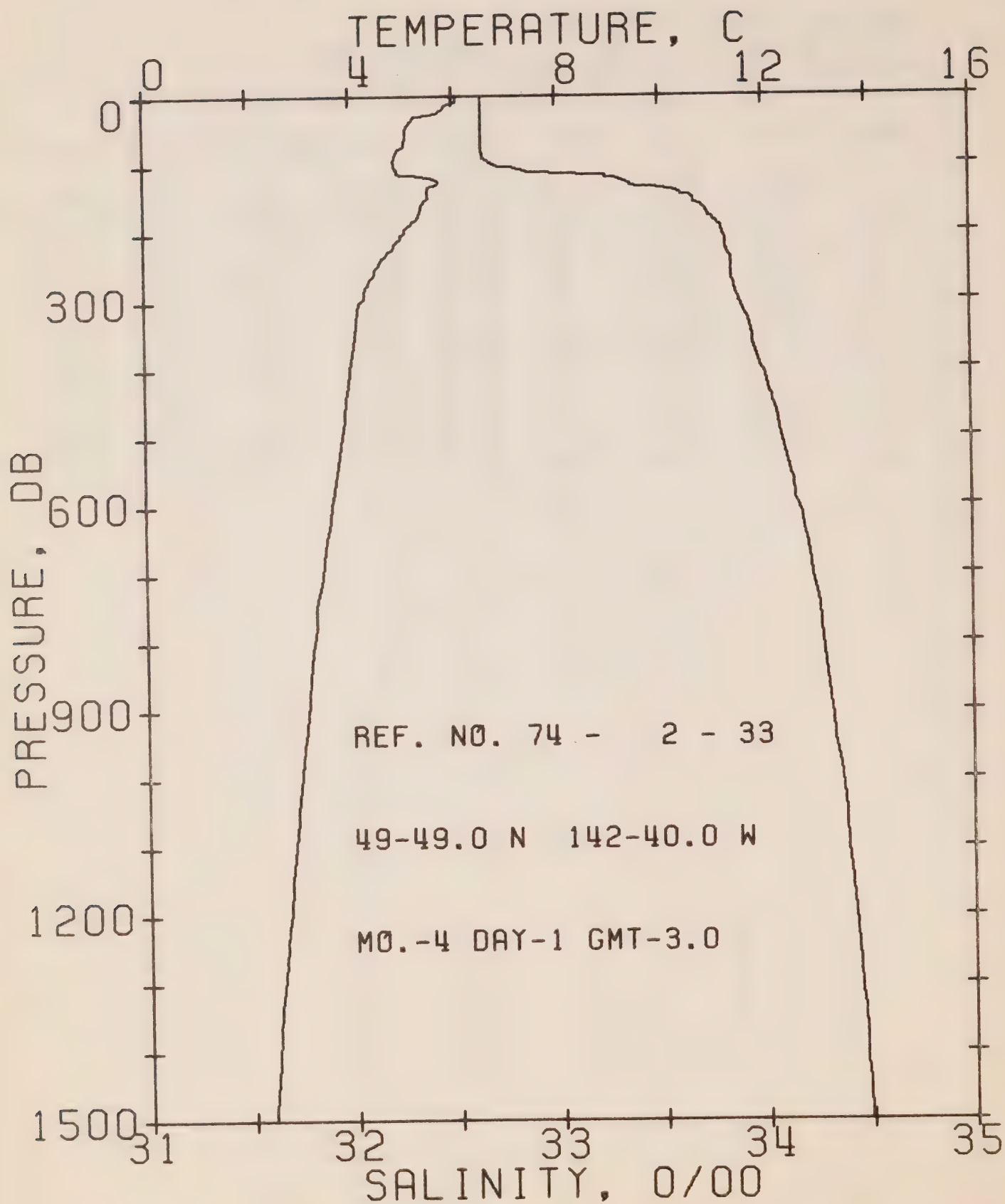
REFERENCE NO. 74- 2- 32

DATE 31/ 3/74

POSITION 50- 0.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 124 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.27	32.67	0	25.82	218.2	0.0	0.0	1469.
10	5.24	32.69	10	25.84	217.0	0.22	0.01	1469.
20	5.23	32.69	20	25.85	216.8	0.43	0.04	1469.
30	5.23	32.69	30	25.85	216.8	0.65	0.10	1469.
50	4.85	32.70	50	25.90	212.2	1.08	0.27	1468.
75	4.81	32.70	75	25.90	211.9	1.61	0.61	1468.
100	4.73	32.71	99	25.92	210.6	2.14	1.08	1468.
125	4.70	33.07	124	26.20	183.5	2.65	1.67	1469.
150	4.76	33.63	149	26.64	142.4	3.04	2.22	1471.
175	4.54	33.74	174	26.75	132.0	3.39	2.79	1470.
200	4.40	33.79	199	26.81	127.0	3.71	3.40	1470.
225	4.35	33.84	223	26.85	123.0	4.02	4.08	1470.
250	4.31	33.88	248	26.89	119.8	4.33	4.82	1471.



OFFSHORE OCEANOGRAPHY GROUP

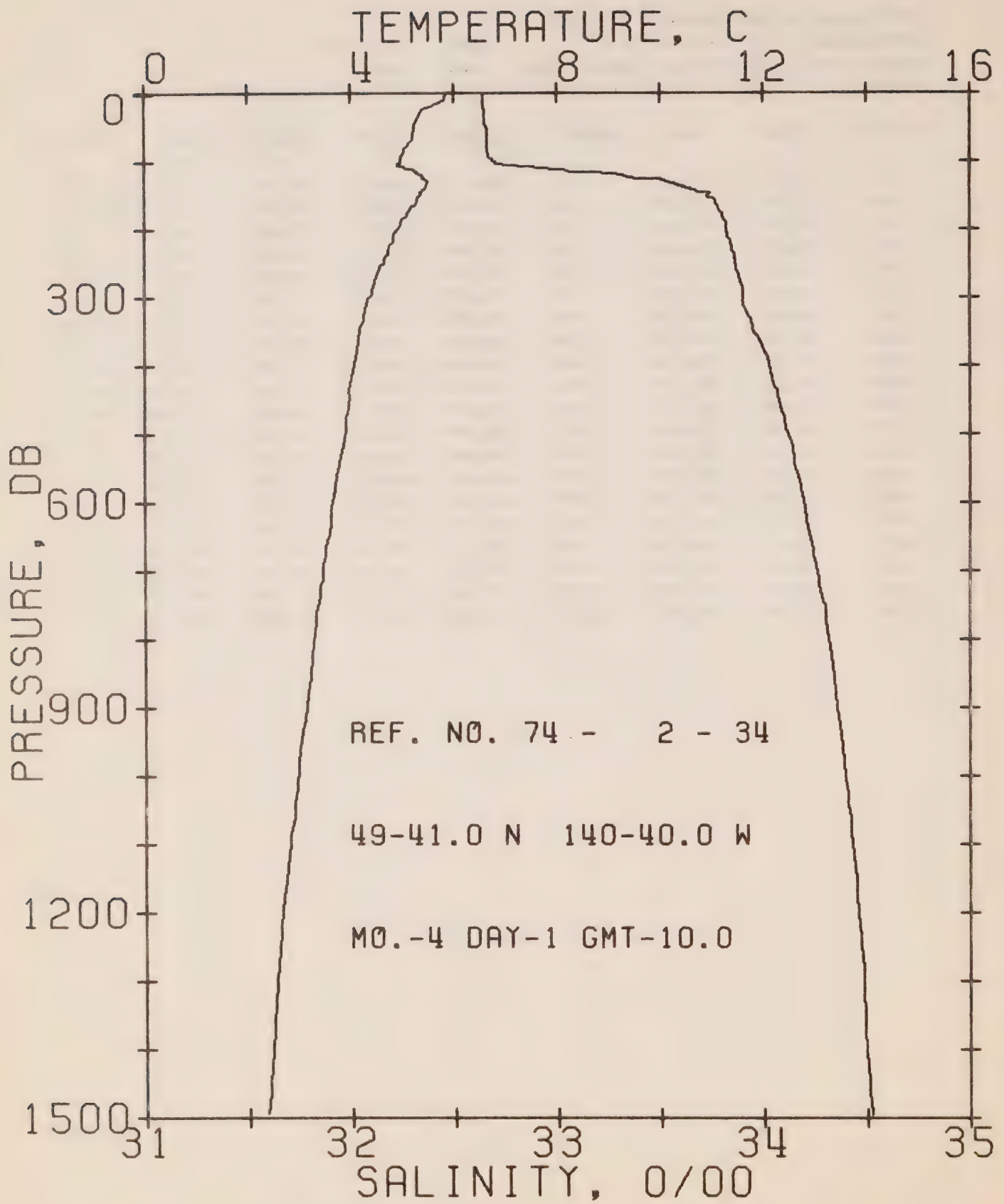
REFERENCE NO. 74- 2- 33

DATE 1/ 4/74

POSITION 49-49.0N, 142-40.0W GMT 3.0

RESULTS OF STP CAST 156 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.07	32.64	0	25.71	229.6	0.0	0.0	1472.
10	6.07	32.64	10	25.71	229.9	0.23	0.01	1472.
20	5.81	32.64	20	25.74	226.9	0.46	0.05	1472.
30	5.26	32.64	30	25.80	220.9	0.68	0.10	1469.
50	5.10	32.64	50	25.82	219.4	1.12	0.28	1469.
75	5.04	32.64	75	25.83	219.0	1.67	0.63	1469.
100	4.88	32.70	99	25.89	212.9	2.21	1.12	1469.
125	5.74	33.33	124	26.29	175.7	2.70	1.67	1474.
150	5.54	33.66	149	26.58	148.9	3.10	2.23	1474.
175	5.33	33.74	174	26.66	140.9	3.46	2.82	1474.
200	5.06	33.81	199	26.75	132.9	3.80	3.48	1473.
225	4.82	33.82	223	26.79	129.6	4.13	4.18	1472.
250	4.54	33.85	248	26.84	124.5	4.44	4.95	1472.
300	4.22	33.89	298	26.91	118.5	5.05	6.66	1471.
400	3.98	33.99	397	27.01	109.3	6.19	10.70	1472.
500	3.82	34.08	496	27.10	101.5	7.24	15.50	1473.
600	3.61	34.16	595	27.18	94.2	8.21	20.97	1474.
800	3.23	34.28	793	27.31	83.0	9.97	33.45	1476.
1000	2.96	34.36	990	27.40	75.0	11.55	47.93	1478.
1200	2.70	34.42	1188	27.48	68.9	12.99	64.02	1480.



OFFSHORE OCEANOGRAPHY GROUP

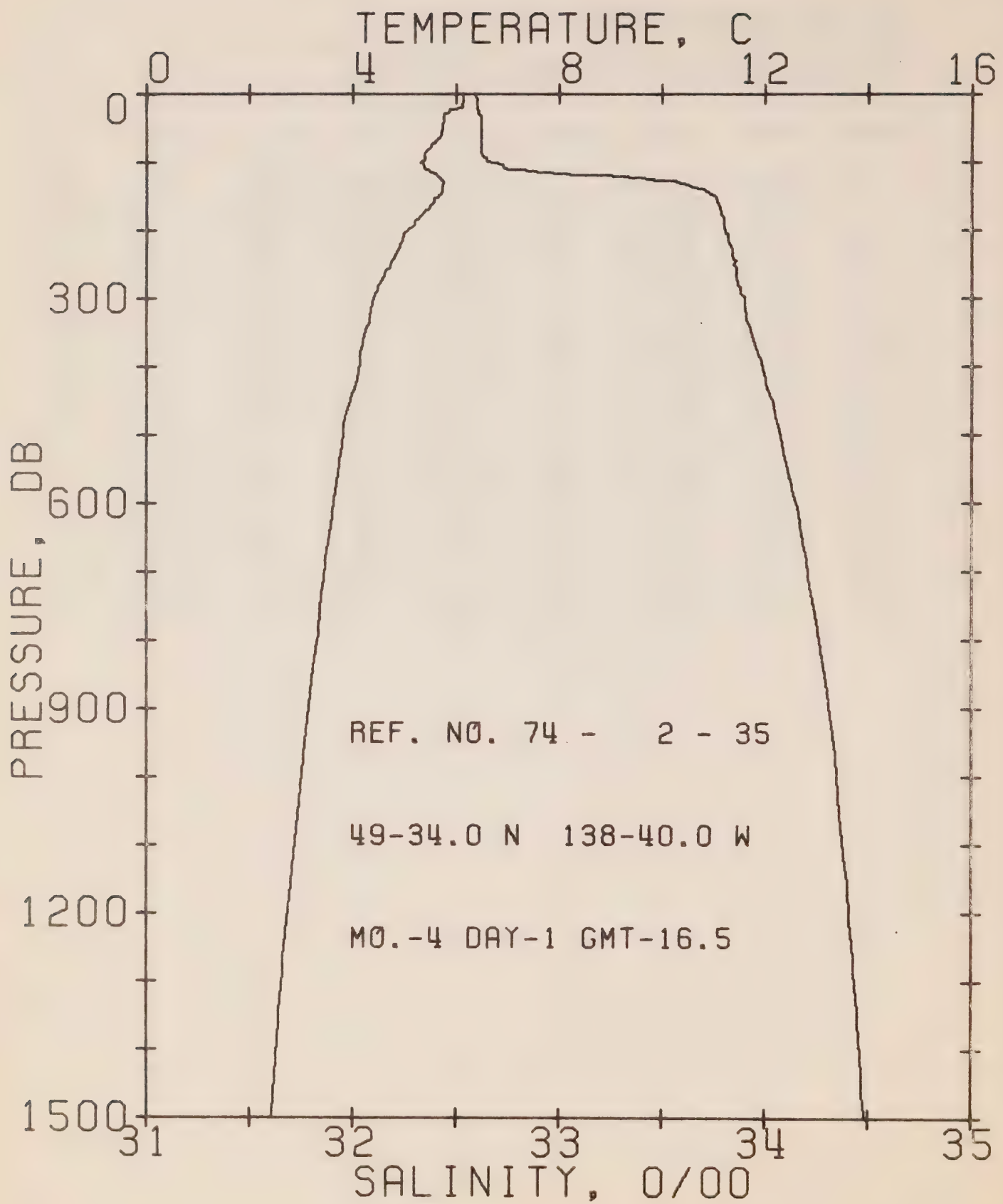
REFERENCE NO. 74- 2- 34

DATE 1/ 4/74

POSITION 49-41.0N, 140-40.0W GMT 10.0

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.83	32.64	0	25.74	226.8	0.0	0.0	1471.
10	5.80	32.64	10	25.74	226.7	0.23	0.01	1471.
20	5.52	32.64	20	25.77	223.6	0.45	0.05	1470.
30	5.34	32.65	30	25.80	221.0	0.67	0.10	1470.
50	5.22	32.66	50	25.82	219.3	1.11	0.28	1470.
75	5.10	32.66	75	25.84	218.2	1.66	0.63	1470.
100	4.95	32.70	99	25.88	213.7	2.20	1.11	1469.
125	5.40	33.37	124	26.37	168.4	2.68	1.66	1473.
150	5.36	33.73	149	26.66	141.3	3.06	2.19	1473.
175	5.10	33.80	174	26.74	133.7	3.40	2.76	1473.
200	4.90	33.82	199	26.78	130.2	3.73	3.39	1472.
225	4.76	33.85	223	26.82	126.7	4.06	4.08	1472.
250	4.63	33.86	248	26.84	124.8	4.37	4.84	1472.
300	4.33	33.90	298	26.90	118.9	4.98	6.54	1472.
400	4.04	34.03	397	27.03	107.1	6.11	10.57	1472.
500	3.87	34.12	496	27.12	99.5	7.14	15.30	1473.
600	3.63	34.19	595	27.21	92.0	8.09	20.64	1474.
800	3.25	34.32	793	27.34	80.3	9.81	32.87	1476.
1000	2.94	34.39	990	27.43	72.4	11.34	46.84	1478.
1200	2.65	34.46	1188	27.51	65.8	12.72	62.24	1480.



OFFSHORE OCEANOGRAPHY GROUP

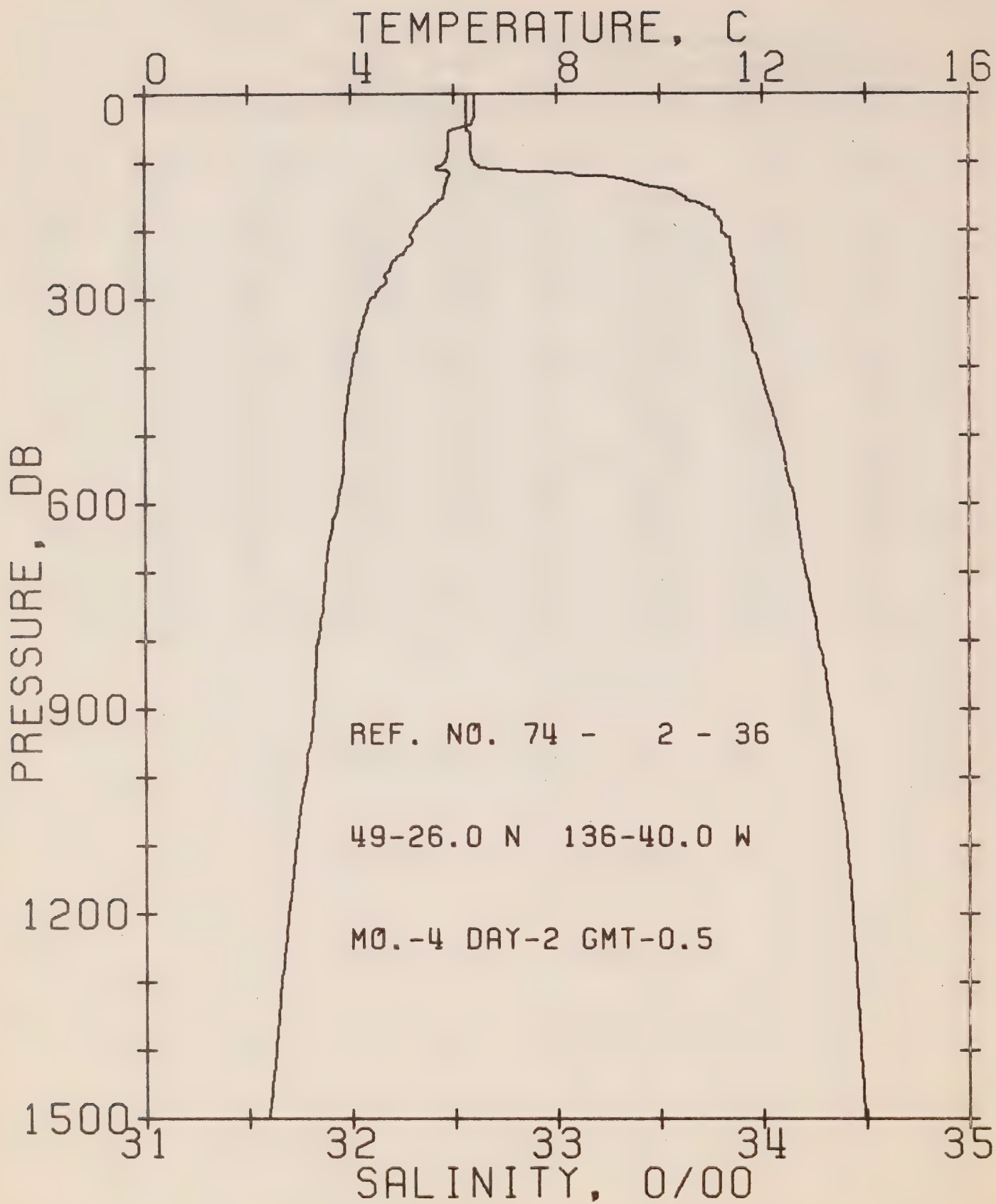
REFERENCE NO. 74- 2- 35

DATE 1/ 4/74

POSITION 49-34.0N, 138-40.0W GMT 16.5

RESULTS OF STP CAST 164 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.13	32.59	0	25.66	234.0	0.0	0.0	1472.
10	6.13	32.60	10	25.67	233.5	0.23	0.01	1473.
20	6.11	32.60	20	25.67	233.5	0.47	0.05	1473.
30	5.77	32.61	30	25.72	228.8	0.70	0.11	1471.
50	5.73	32.62	50	25.73	227.9	1.15	0.29	1472.
75	5.53	32.62	75	25.76	225.8	1.72	0.65	1471.
100	5.37	32.65	99	25.80	222.1	2.28	1.15	1471.
125	5.71	33.46	124	26.40	165.6	2.79	1.74	1474.
150	5.66	33.75	149	26.63	143.6	3.17	2.27	1474.
175	5.37	33.79	174	26.70	137.6	3.52	2.85	1474.
200	5.05	33.81	199	26.75	132.8	3.86	3.49	1473.
225	4.91	33.83	223	26.79	129.6	4.19	4.20	1473.
250	4.72	33.85	248	26.82	126.3	4.51	4.98	1472.
300	4.41	33.90	298	26.89	119.8	5.13	6.71	1472.
400	4.11	33.99	397	26.99	111.2	6.29	10.84	1473.
500	3.81	34.07	496	27.09	102.1	7.35	15.71	1473.
600	3.61	34.15	595	27.17	95.2	8.34	21.25	1474.
800	3.30	34.26	793	27.29	85.3	10.14	34.05	1476.
1000	3.00	34.35	990	27.39	76.6	11.74	48.75	1478.
1200	2.72	34.41	1188	27.46	70.2	13.21	65.19	1480.



OFFSHORE OCEANOGRAPHY GROUP

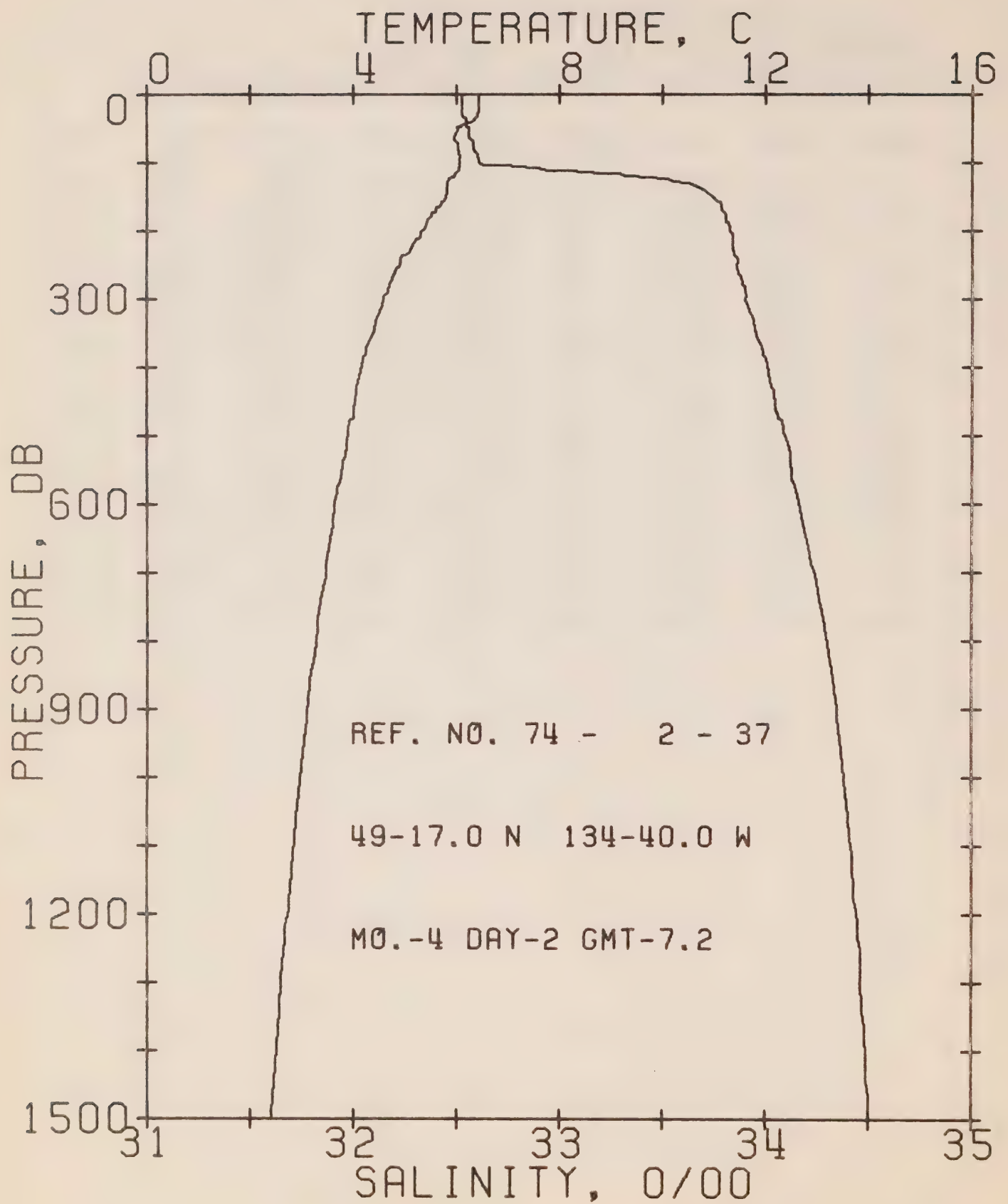
REFERENCE NO. 74- 2- 36

DATE 2/ 4/74

POSITION 49-26.0N, 136-40.0W GMT 0.5

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.40	32.56	0	25.60	239.5	0.0	0.0	1473.
10	6.40	32.56	10	25.60	239.8	0.24	0.01	1474.
20	6.41	32.56	20	25.60	240.0	0.48	0.05	1474.
30	6.40	32.56	30	25.60	239.9	0.72	0.11	1474.
50	6.05	32.56	50	25.65	236.1	1.20	0.30	1473.
75	5.89	32.58	75	25.68	233.0	1.78	0.68	1473.
100	5.83	32.60	99	25.70	231.2	2.36	1.19	1473.
125	5.87	33.32	124	26.27	177.6	2.89	1.80	1474.
150	5.78	33.62	149	26.51	154.8	3.30	2.37	1475.
175	5.48	33.77	174	26.67	140.2	3.67	2.98	1474.
200	5.20	33.80	199	26.73	135.1	4.01	3.63	1473.
225	5.09	33.84	223	26.77	131.2	4.34	4.35	1474.
250	4.78	33.85	248	26.81	127.1	4.66	5.13	1473.
300	4.39	33.88	298	26.88	121.1	5.28	6.87	1472.
400	4.02	33.98	397	27.00	110.3	6.44	10.98	1472.
500	3.87	34.07	496	27.09	102.7	7.50	15.85	1473.
600	3.73	34.15	595	27.16	96.1	8.50	21.42	1474.
800	3.34	34.26	793	27.29	85.1	10.31	34.30	1476.
1000	3.09	34.36	990	27.39	76.4	11.91	49.00	1479.
1200	2.76	34.43	1188	27.48	69.1	13.36	65.18	1481.



OFFSHORE OCEANOGRAPHY GROUP

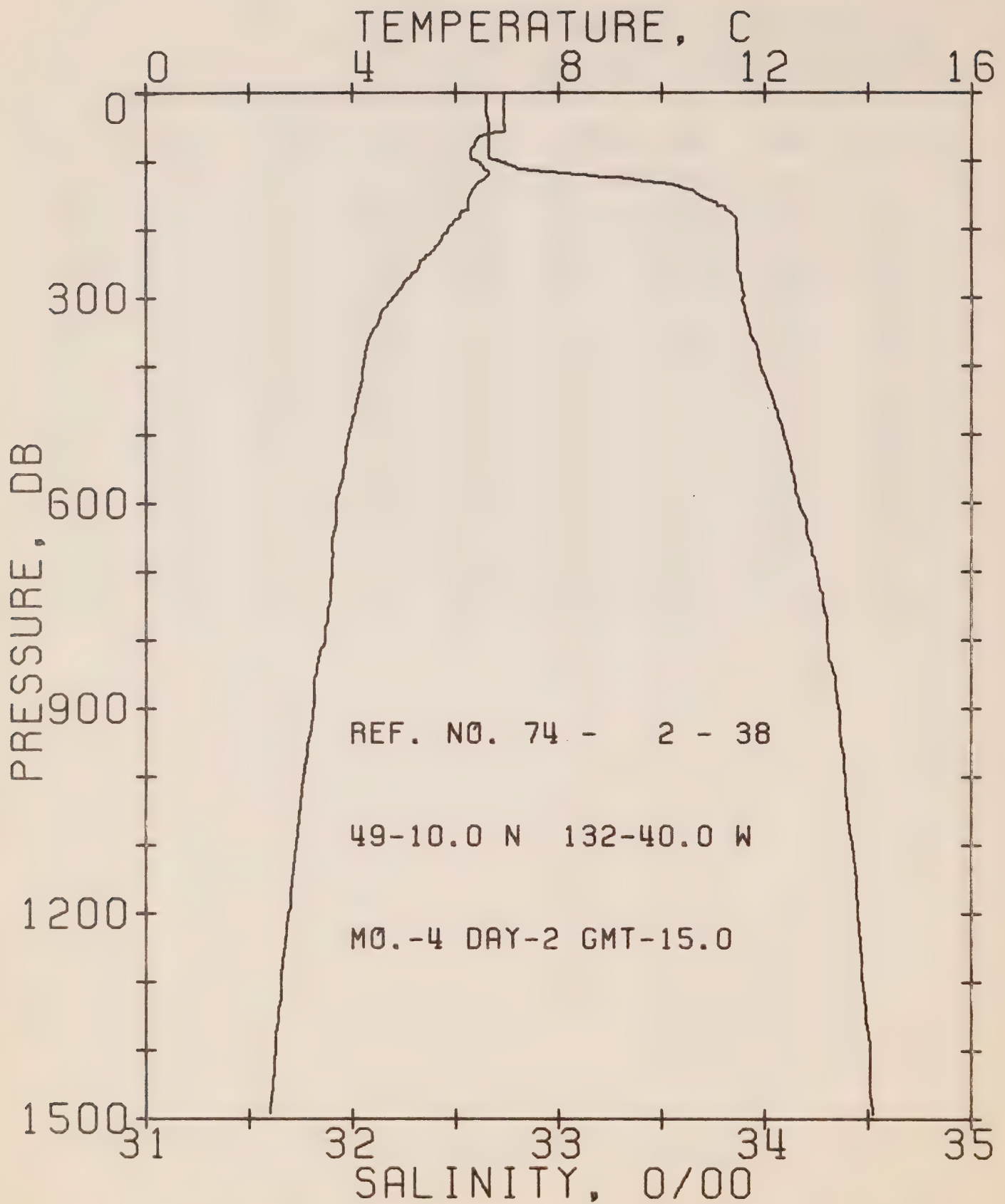
REFERENCE NO. 74- 2- 37

DATE 2/ 4/74

POSITION 49-17.0N, 134-40.0W GMT 7.2

RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.42	32.53	0	25.58	241.9	0.0	0.0	1474.
10	6.42	32.53	10	25.58	242.2	0.24	0.01	1474.
20	6.42	32.53	20	25.58	242.4	0.48	0.05	1474.
30	6.41	32.53	30	25.58	242.4	0.73	0.11	1474.
50	6.02	32.56	50	25.65	235.7	1.21	0.31	1473.
75	6.03	32.58	75	25.66	234.6	1.79	0.68	1473.
100	6.05	32.61	99	25.69	232.9	2.38	1.20	1474.
125	5.84	33.54	124	26.44	161.2	2.88	1.77	1475.
150	5.79	33.74	149	26.61	145.7	3.25	2.30	1475.
175	5.52	33.80	174	26.69	138.2	3.61	2.89	1474.
200	5.33	33.83	199	26.74	134.3	3.95	3.54	1474.
225	5.12	33.84	223	26.77	131.4	4.28	4.26	1474.
250	4.88	33.86	248	26.81	127.2	4.60	5.03	1473.
300	4.59	33.90	298	26.88	121.5	5.22	6.77	1473.
400	4.14	34.01	397	27.01	109.8	6.38	10.89	1473.
500	3.89	34.09	496	27.10	101.4	7.44	15.73	1473.
600	3.63	34.16	595	27.18	94.4	8.42	21.22	1474.
800	3.28	34.30	793	27.33	81.7	10.18	33.72	1476.
1000	2.96	34.38	990	27.42	73.4	11.72	47.87	1478.
1200	2.72	34.44	1188	27.49	67.6	13.13	63.69	1480.



OFFSHORE OCEANOGRAPHY GROUP

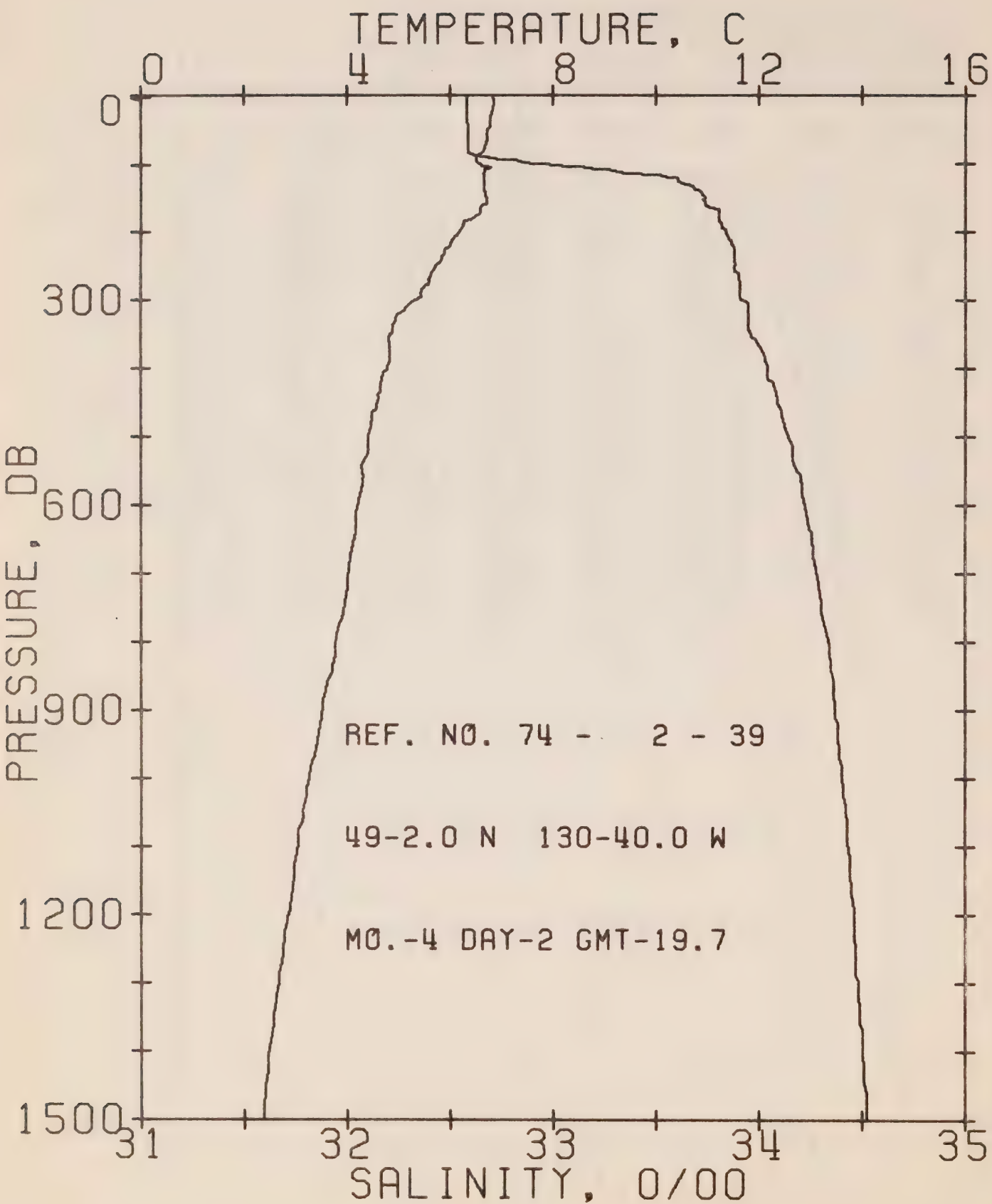
REFERENCE NO. 74- 2- 38

DATE 2/ 4/74

POSITION 49-10.0N, 132-40.0W GMT 15.0

RESULTS OF STP CAST 183 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.93	32.65	0	25.60	239.3	0.0	0.0	1476.
10	6.92	32.65	10	25.61	239.5	0.24	0.01	1476.
20	6.92	32.65	20	25.61	239.7	0.48	0.05	1476.
30	6.93	32.65	30	25.60	239.9	0.72	0.11	1476.
50	6.96	32.66	50	25.61	239.8	1.20	0.31	1477.
75	6.36	32.66	75	25.69	232.6	1.79	0.68	1475.
100	6.39	32.70	99	25.71	230.3	2.37	1.20	1475.
125	6.57	33.31	124	26.17	187.0	2.91	1.82	1477.
150	6.28	33.68	149	26.50	156.4	3.32	2.40	1477.
175	6.10	33.83	174	26.64	143.1	3.70	3.02	1477.
200	5.83	33.86	199	26.70	138.1	4.05	3.68	1476.
225	5.61	33.87	223	26.73	135.0	4.39	4.42	1476.
250	5.30	33.87	248	26.77	131.6	4.72	5.23	1475.
300	4.78	33.90	298	26.85	124.0	5.36	7.02	1474.
400	4.21	33.98	397	26.98	112.8	6.54	11.22	1473.
500	3.92	34.09	496	27.10	102.1	7.62	16.14	1473.
600	3.68	34.16	595	27.18	94.9	8.60	21.65	1474.
800	3.46	34.30	793	27.31	83.8	10.37	34.21	1477.
1000	3.05	34.39	990	27.42	74.2	11.93	48.51	1478.
1200	2.75	34.45	1188	27.49	67.4	13.34	64.36	1480.



OFFSHORE OCEANOGRAPHY GROUP

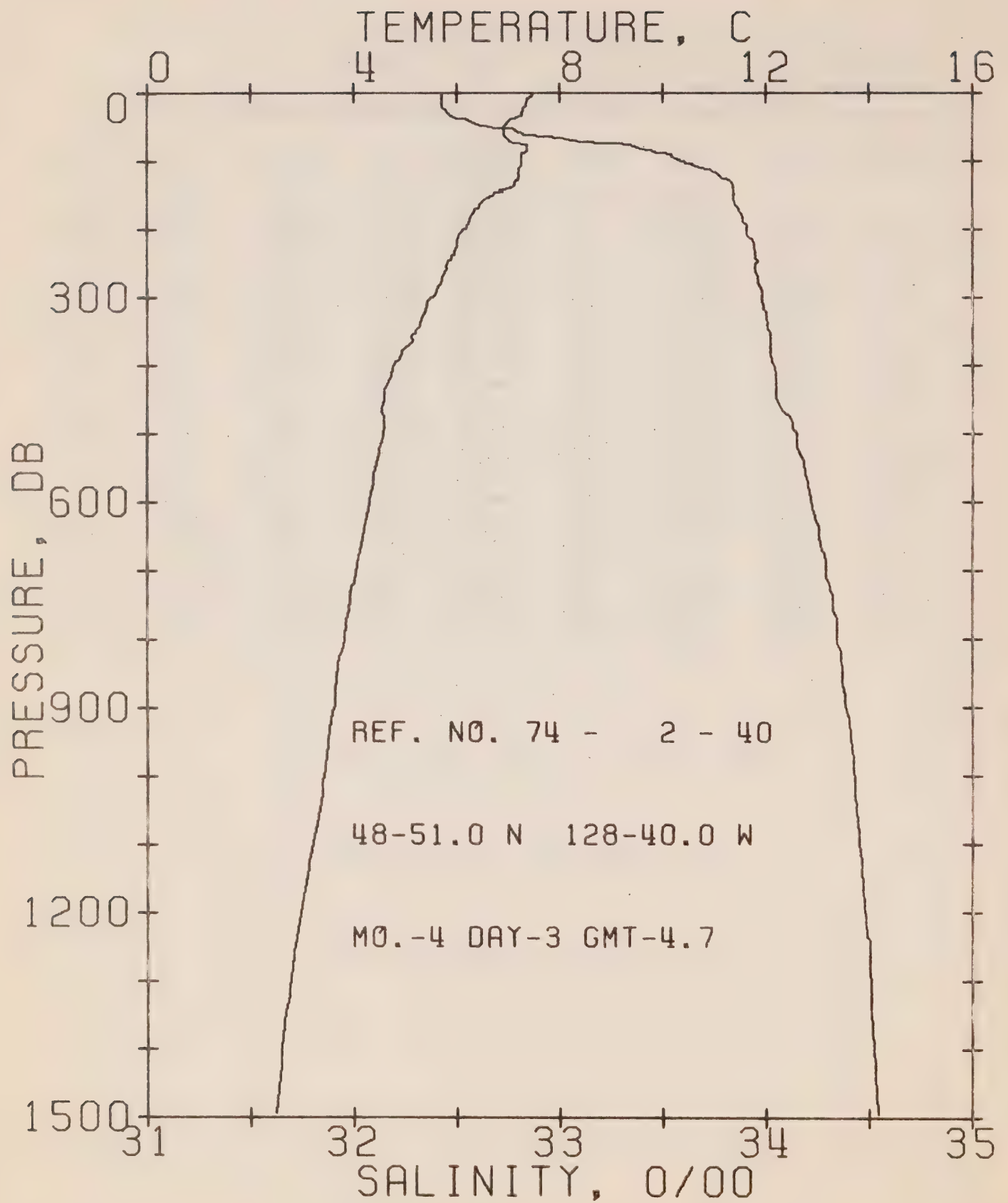
REFERENCE NO. 74- 2- 39

DATE 2/ 4/74

POSITION 49- 2.0N, 130-40.0W GMT 19.7

RESULTS OF STP CAST 229 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.84	32.58	0	25.56	243.4	0.0	0.0	1475.
10	6.85	32.58	10	25.56	243.9	0.24	0.01	1475.
20	6.82	32.58	20	25.56	243.6	0.49	0.05	1475.
30	6.78	32.58	30	25.57	243.2	0.73	0.11	1475.
50	6.73	32.59	50	25.58	242.1	1.22	0.31	1476.
75	6.67	32.59	75	25.59	241.7	1.82	0.70	1476.
100	6.57	32.94	99	25.88	214.6	2.40	1.21	1476.
125	6.66	33.61	124	26.39	166.1	2.87	1.74	1478.
150	6.72	33.74	149	26.49	157.8	3.27	2.30	1479.
175	6.53	33.81	174	26.57	150.2	3.66	2.94	1478.
200	6.17	33.84	199	26.64	143.7	4.02	3.64	1477.
225	5.92	33.88	223	26.70	138.0	4.37	4.41	1477.
250	5.72	33.88	248	26.73	135.9	4.72	5.23	1477.
300	5.34	33.92	298	26.81	128.6	5.38	7.09	1476.
400	4.77	34.04	397	26.97	114.3	6.58	11.36	1475.
500	4.40	34.14	496	27.09	103.7	7.67	16.34	1476.
600	4.19	34.22	595	27.17	96.1	8.66	21.92	1476.
800	3.77	34.34	793	27.31	84.5	10.48	34.84	1478.
1000	3.25	34.40	990	27.41	75.3	12.08	49.48	1479.
1200	2.84	34.46	1188	27.49	67.6	13.50	65.43	1481.



OFFSHORE OCEANOGRAPHY GROUP

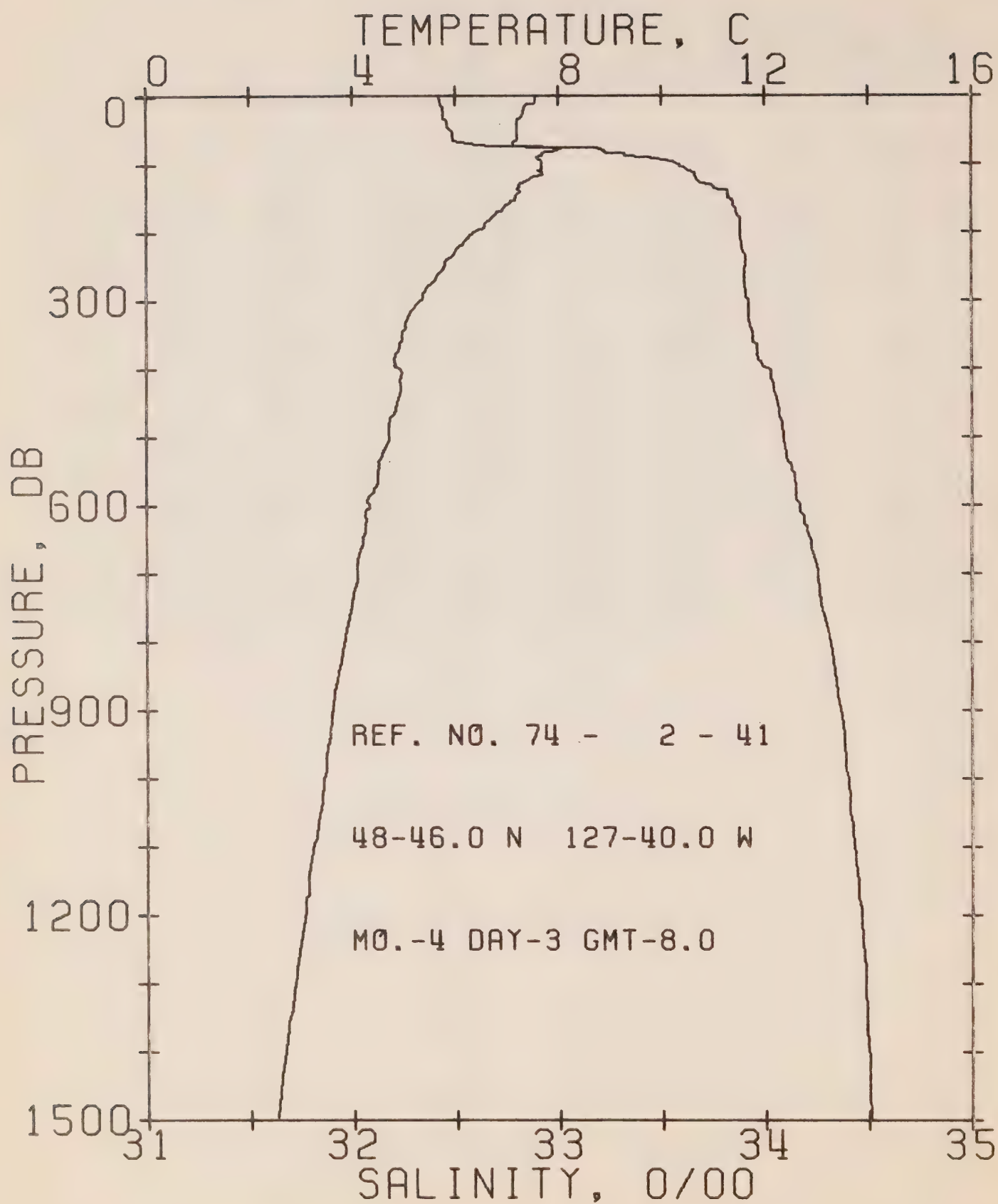
REFERENCE NO. 74- 2- 40

DATE 3/ 4/74

POSITION 48-51.0N, 128-40.0W GMT 4.7

RESULTS OF STP CAST 210 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.46	32.43	0	25.36	262.6	0.0	0.0	1477.
10	7.36	32.43	10	25.37	261.6	0.26	0.01	1477.
20	7.33	32.43	20	25.38	261.3	0.52	0.05	1477.
30	7.25	32.46	30	25.41	258.2	0.78	0.12	1477.
50	6.92	32.67	50	25.62	238.5	1.28	0.32	1476.
75	7.28	33.33	75	26.09	194.4	1.83	0.67	1479.
100	7.26	33.60	99	26.31	174.4	2.29	1.08	1480.
125	7.19	33.79	124	26.46	159.7	2.71	1.56	1480.
150	6.68	33.84	149	26.58	149.2	3.09	2.09	1479.
175	6.31	33.87	174	26.65	142.7	3.46	2.70	1478.
200	6.15	33.91	199	26.70	138.3	3.81	3.37	1478.
225	5.99	33.94	223	26.74	134.3	4.15	4.11	1477.
250	5.80	33.96	248	26.78	131.0	4.48	4.91	1477.
300	5.52	33.98	298	26.83	126.6	5.13	6.72	1477.
400	4.77	34.04	397	26.96	114.6	6.34	11.02	1475.
500	4.55	34.15	496	27.07	104.9	7.44	16.08	1476.
600	4.29	34.22	595	27.16	97.7	8.45	21.74	1477.
800	3.82	34.34	793	27.30	84.8	10.26	34.58	1478.
1000	3.41	34.43	990	27.41	75.4	11.85	49.12	1480.
1200	2.96	34.48	1188	27.50	67.5	13.28	65.17	1481.



OFFSHORE OCEANOGRAPHY GROUP

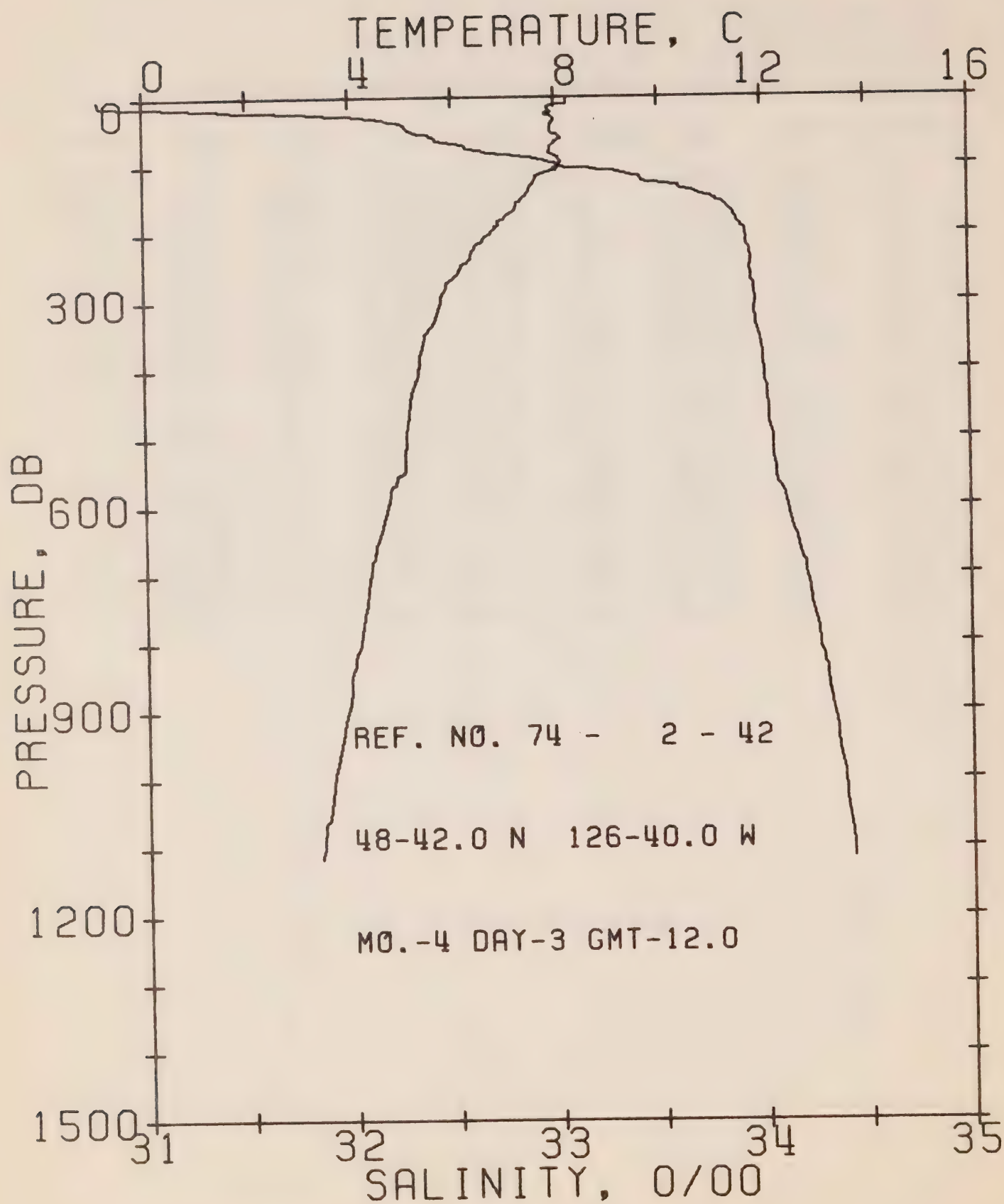
REFERENCE NO. 74- 2- 41

DATE 3/ 4/74

POSITION 48-46.0N, 127-40.0W GMT 8.0

RESULTS OF STP CAST 227 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.54	32.42	0	25.34	264.4	0.0	0.0	1478.
10	7.52	32.43	10	25.35	263.8	0.26	0.01	1478.
20	7.32	32.44	20	25.39	260.5	0.53	0.05	1477.
30	7.28	32.44	30	25.39	260.0	0.79	0.12	1477.
50	7.19	32.47	50	25.43	256.8	1.30	0.33	1477.
75	7.49	33.05	75	25.84	218.0	1.93	0.73	1480.
100	7.68	33.59	99	26.24	180.8	2.42	1.17	1481.
125	7.37	33.68	124	26.35	170.3	2.86	1.67	1481.
150	7.17	33.82	149	26.49	157.5	3.27	2.24	1481.
175	6.76	33.87	174	26.59	148.7	3.65	2.87	1479.
200	6.33	33.88	199	26.65	142.8	4.01	3.56	1478.
225	6.03	33.89	223	26.70	138.6	4.37	4.33	1477.
250	5.78	33.91	248	26.74	134.5	4.71	5.15	1477.
300	5.33	33.92	298	26.81	128.7	5.37	7.00	1476.
400	4.88	34.01	397	26.93	117.6	6.60	11.40	1476.
500	4.69	34.09	496	27.01	110.7	7.74	16.63	1477.
600	4.32	34.17	595	27.12	101.5	8.80	22.57	1477.
800	3.83	34.31	793	27.28	87.1	10.68	35.93	1478.
1000	3.42	34.40	991	27.39	77.3	12.32	50.88	1480.
1200	3.04	34.46	1188	27.48	70.0	13.79	67.38	1482.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 74- 2- 42

DATE 3/ 4/74

POSITION 48-42.0N, 126-40.0W GMT 12.0

RESULTS OF STP CAST 193 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.25	30.78	0	23.96	396.2	0.0	0.0	1478.
10	8.01	30.88	10	24.07	385.9	0.40	0.02	1478.
20	7.90	31.61	20	24.65	330.1	0.76	0.07	1478.
30	7.98	32.13	30	25.05	292.3	1.06	0.15	1480.
50	7.94	32.31	50	25.20	279.0	1.63	0.38	1480.
75	7.93	32.57	75	25.40	259.8	2.31	0.81	1481.
100	8.08	33.01	99	25.73	229.2	2.91	1.35	1482.
125	7.57	33.46	124	26.15	189.4	3.42	1.93	1481.
150	7.34	33.78	149	26.44	162.8	3.86	2.54	1481.
175	7.02	33.87	174	26.55	152.1	4.25	3.19	1480.
200	6.73	33.92	199	26.63	145.0	4.62	3.90	1480.
225	6.38	33.94	223	26.69	139.3	4.97	4.67	1479.
250	6.15	33.94	248	26.72	136.3	5.32	5.50	1478.
300	5.76	33.97	298	26.79	130.2	5.98	7.37	1478.
400	5.32	34.01	397	26.88	123.3	7.25	11.88	1478.
500	5.06	34.05	496	26.94	118.1	8.46	17.41	1478.
600	4.69	34.11	595	27.03	109.9	9.61	23.87	1478.
800	4.12	34.27	793	27.22	93.5	11.63	38.21	1479.
1000	3.59	34.38	991	27.36	80.7	13.37	54.11	1481.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 74- 2- 43

DATE 3/ 4/74

POSITION 48-38.0N, 126- 0.0W GMT 14.7

RESULTS OF STP CAST 51 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.08	31.11	0	24.24	369.3	0.0	0.0	1478.
10	7.96	31.17	10	24.30	363.5	0.37	0.02	1478.
20	8.16	32.05	20	24.96	300.8	0.70	0.07	1480.
30	8.29	32.24	30	25.09	288.7	0.99	0.14	1481.
50	8.00	32.66	50	25.46	253.9	1.53	0.36	1481.
75	7.87	32.89	75	25.66	235.4	2.14	0.75	1481.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	8.08	31.11	34.	8.18	32.28
4.	8.08	31.12	34.	8.17	32.30
6.	8.09	31.13	35.	8.16	32.31
7.	8.01	31.15	37.	8.09	32.31
8.	8.01	31.16	37.	8.05	32.34
9.	7.92	31.17	40.	8.03	32.44
10.	7.96	31.17	41.	8.02	32.51
11.	7.92	31.18	42.	8.00	32.52
12.	7.97	31.18	42.	7.99	32.55
13.	7.81	31.26	44.	7.99	32.59
14.	7.79	31.64	46.	7.99	32.59
15.	7.90	31.69	47.	7.99	32.60
16.	7.90	31.74	48.	7.99	32.63
18.	8.00	31.90	51.	8.00	32.67
19.	8.07	32.05	54.	8.00	32.69
20.	8.16	32.05	58.	7.99	32.70
21.	8.19	32.06	61.	7.93	32.77
22.	8.19	32.06	62.	7.92	32.77
24.	8.19	32.13	65.	7.91	32.79
25.	8.19	32.21	67.	7.91	32.80
26.	8.22	32.22	71.	7.88	32.87
27.	8.26	32.23	72.	7.88	32.87
28.	8.29	32.23	77.	7.87	32.90
30.	8.29	32.24	80.	7.87	32.90
30.	8.26	32.24	81.	7.87	32.91
31.	8.26	32.24			

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 74- 2- 44

DATE 3/ 4/74

POSITION 48-33.0N, 125-33.0W GMT 16.3

RESULTS OF STP CAST 61 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.07	31.38	0	24.45	349.0	0.0	0.0	1478.
10	8.14	32.16	10	25.05	292.3	0.33	0.02	1480.
20	8.22	32.36	20	25.20	278.6	0.61	0.06	1481.
30	8.07	32.40	30	25.25	273.7	0.89	0.13	1480.
50	7.95	32.45	50	25.31	268.6	1.43	0.35	1480.
75	7.69	32.58	75	25.44	255.7	2.09	0.77	1480.
100	7.71	33.19	99	25.92	210.8	2.68	1.29	1481.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	8.07	31.38	66.	7.75	32.48
3.	8.08	31.42	71.	7.73	32.51
5.	8.12	31.55	73.	7.68	32.51
7.	8.13	31.57	74.	7.68	32.51
8.	8.13	32.15	75.	7.69	32.58
9.	8.13	32.16	76.	7.70	32.60
10.	8.14	32.16	77.	7.80	32.63
11.	8.19	32.22	78.	7.84	32.73
13.	8.20	32.27	79.	7.91	32.73
14.	8.18	32.27	80.	7.89	32.73
16.	8.18	32.32	81.	7.89	32.75
18.	8.22	32.36	82.	7.90	32.80
20.	8.22	32.36	84.	7.91	32.83
23.	8.15	32.36	85.	7.93	32.83
24.	8.10	32.36	86.	7.93	32.83
25.	8.10	32.36	87.	7.93	32.85
26.	8.09	32.38	88.	7.93	32.85
27.	8.09	32.38	89.	7.87	32.85
28.	8.07	32.38	90.	7.81	32.94
30.	8.07	32.40	91.	7.79	33.03
36.	8.01	32.42	92.	7.75	33.09
37.	8.00	32.43	93.	7.75	33.15
43.	7.97	32.44	97.	7.74	33.17
45.	7.96	32.45	98.	7.74	33.17
54.	7.94	32.45	99.	7.71	33.19
56.	7.92	32.45	103.	7.70	33.20
58.	7.91	32.45	105.	7.69	33.23
59.	7.91	32.45	106.	7.68	33.25
62.	7.87	32.45	109.	7.63	33.27
64.	7.81	32.46	110.	7.61	33.30
65.	7.79	32.47			

SURFACE TEMPERATURE AND SALINITY OBSERVATIONS

(P-74-2)

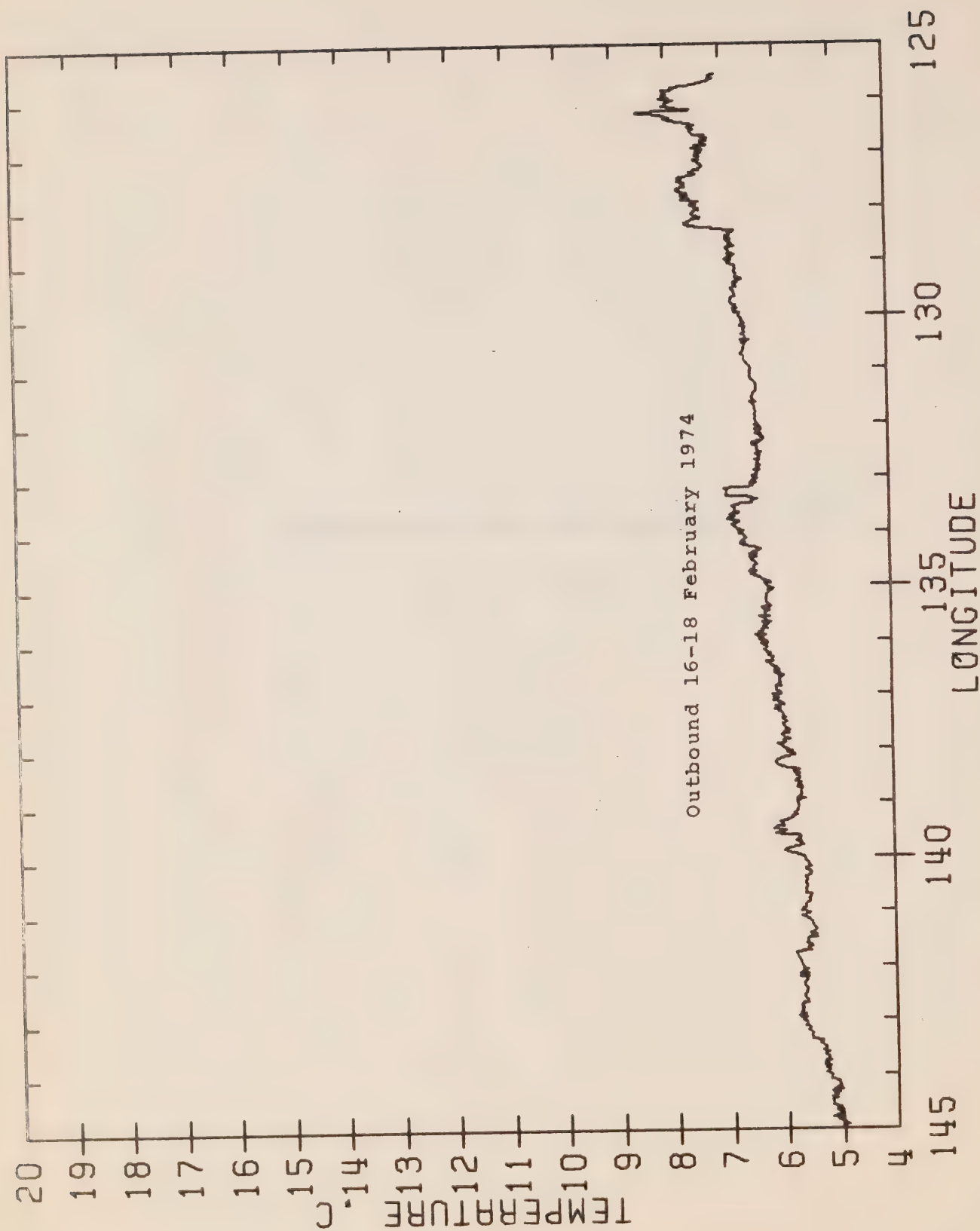


Figure 15 Surface temperature along Line P recorded from engine room intake. P-74-2

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 74- 2

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
74	2	16	45	29.188	7.6	125-33
74	2	16	210	32.004	7.6	126- 0
74	2	16	355	32.422	7.6	126-40
74	2	16	630	31.677	7.6	127-40
74	2	16	1000	32.480	7.6	128-40
74	2	16	1235		7.1	129-40
74	2	16	1645		6.7	130-40
74	2	16	2000	32.571	6.7	131-40
74	2	16	2330	32.624	6.5	132-40
74	2	17	400	32.621	7.2	133-40
74	2	17	730	32.568	7.0	134-40
74	2	17	940	32.506	6.6	135-40
74	2	17	1235	32.528	6.6	136-40
74	2	17	1610	32.579	6.3	137-40
74	2	17	2020	32.582	6.3	138-40
74	2	17	2255	32.588	5.8	139-40
74	2	18	230	32.585	5.8	140-40
74	2	18	700	32.608	5.8	141-40
74	2	18	1000	32.224	5.8	142-40
74	2	18	1530	32.619	5.5	143-40
74	2	18	2100		5.3	ON STATION
74	2	19	0	32.688	5.3	ON STATION
74	2	20	0	32.678	5.3	ON STATION
74	2	21	0	32.687	5.1	ON STATION
74	2	22	0	32.685	4.7	ON STATION
74	2	23	0	32.685	4.9	ON STATION
74	2	24	0	32.686	5.0	ON STATION
74	2	25	0	32.700	4.7	ON STATION
74	2	26	0	32.725	4.9	ON STATION
74	2	27	0	32.730	5.0	ON STATION
74	2	28	0	32.714	5.0	ON STATION
74	3	1	0	32.705	5.0	ON STATION
74	3	2	0	32.734	4.8	ON STATION
74	3	3	0	32.696	5.1	ON STATION
74	3	4	0	32.694	5.0	ON STATION
74	3	5	0	32.710	5.1	ON STATION
74	3	6	0	32.734	4.7	ON STATION
74	3	7	0	32.734	4.7	ON STATION
74	3	8	0	32.693	5.0	ON STATION
74	3	9	0	32.707	5.0	ON STATION
74	3	10	0	32.705	4.9	ON STATION
74	3	11	0	32.720	4.7	ON STATION
74	3	12	0	32.722	4.7	ON STATION
74	3	13	0	32.722	4.8	ON STATION
74	3	14	0	32.716	4.8	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 74- 2

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
74	3	19	0	32.716	4.8	ON STATION
74	3	20	0	32.715	4.8	ON STATION
74	3	21	0	32.721	4.9	ON STATION
74	3	22	0	32.730	4.8	ON STATION
74	3	23	0	32.723	4.9	ON STATION
74	3	24	0	32.726	5.0	ON STATION
74	3	25	0	32.708	4.9	ON STATION
74	3	26	0	32.704	5.1	ON STATION
74	3	27	0	32.708	5.4	ON STATION
74	3	28	0	32.702	5.6	ON STATION
74	3	29	0	32.698	5.4	ON STATION
74	3	30	0	32.698	5.6	ON STATION
74	3	31	0	32.696	5.4	ON STATION
74	3	31	2300	32.624	6.0	143-40
74	4	1	300	32.628	6.3	142-40
74	4	1	700	32.628	6.5	141-40
74	4	1	1000	32.620	6.6	140-40
74	4	1	1330	32.601	6.0	139-40
74	4	1	1615	32.608	6.2	138-40
74	4	1	2100	32.598	6.1	137-40
74	4	2	30	32.568	6.6	136-40
74	4	2	400	32.530	6.7	135-40
74	4	2	800	32.513	6.4	134-40
74	4	2	1130	32.513	6.5	133-40
74	4	2	1500	32.622	7.0	132-40
74	4	2	1940	32.607	6.8	131-40
74	4	2	2140	32.557	7.0	130-40
74	4	3	145	32.404	7.4	129-40
74	4	3	500	32.355	7.3	128-40
74	4	3	800	32.400	7.3	127-40
74	4	3	1240	30.859	8.4	126-40
74	4	3	1440	31.059	8.3	126- 0
74	4	3	1630	31.293	8.2	125-33

OCEANOGRAPHIC DATA OBTAINED ON CRUISE P-74-3
(CODC REFERENCE NO. 15-74-003)

SURFACE TEMPERATURE AND SALINITY OBSERVATIONS

(P-74-3)

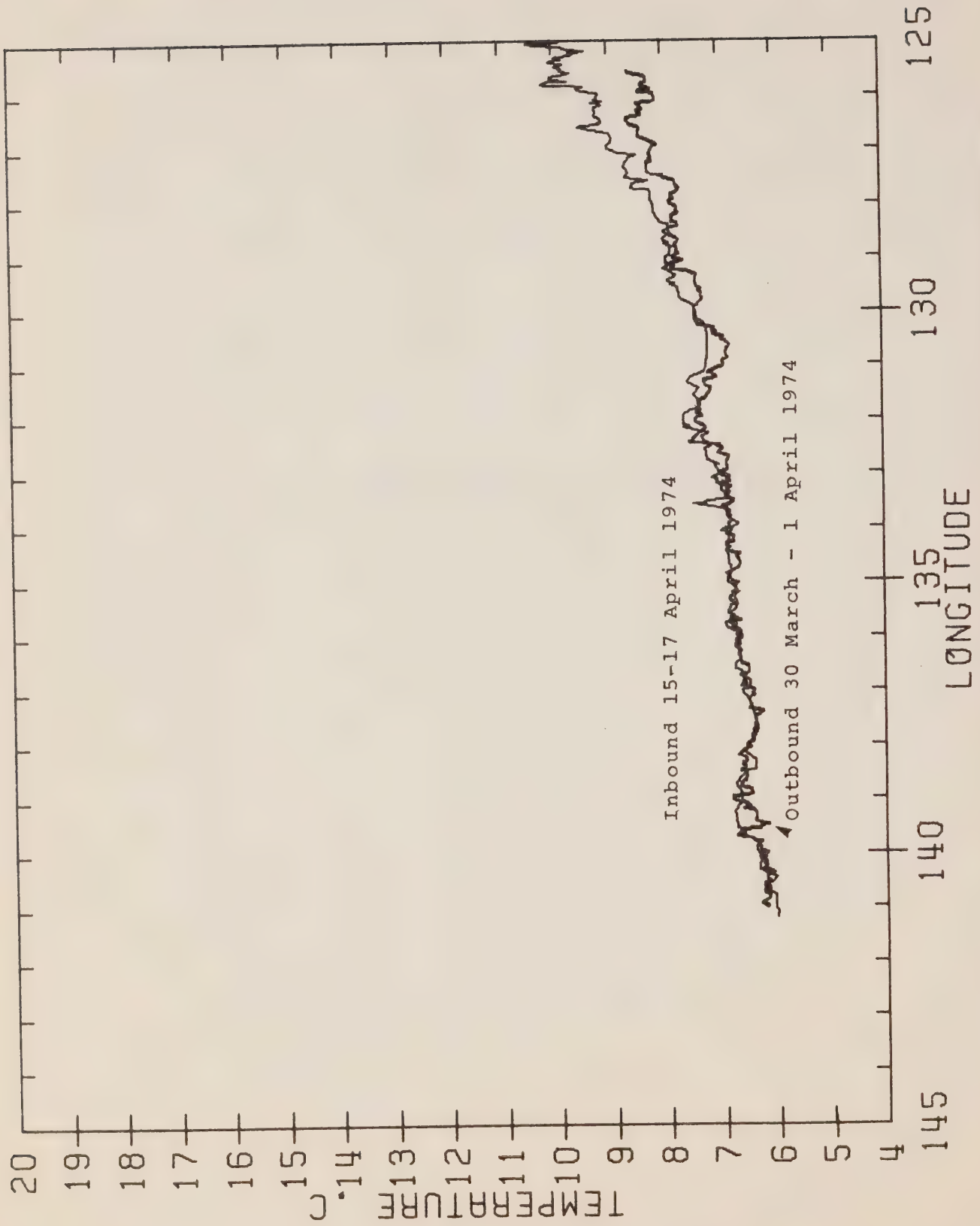


Figure 16 Surface temperature along Line P recorded from engine room intake. P-74-3

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 74- 3

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
74	3	29	2355	30.977		125-34
74	3	30	120	30.975	8.1	126- 0
74	3	30	400	32.377	8.4	126-40
74	3	30	700	32.321	7.9	127-40
74	3	30	1345	32.603	7.5	129-40
74	3	30	1800	32.563	6.7	130-40
74	3	30	2200	32.602	6.7	131-40
74	3	31	230	32.533	6.9	132-40
74	3	31	536	32.519	6.5	134-40
74	3	31	836	32.534	6.5	135-40
74	3	31	1142	32.540	6.2	136-41
74	3	31	1500	32.577	6.3	137-40
74	3	31	1800	32.608	6.0	138-40
74	3	31	2100	32.617	6.3	139-40
74	4	1	300	32.615	5.8	141-40
74	4	3	0	32.698	5.1	ON STATION
74	4	4	0	32.694	5.2	ON STATION
74	4	5	0	32.693	5.6	ON STATION
74	4	6	0	32.687	5.2	ON STATION
74	4	7	0	32.667	5.7	ON STATION
74	4	8	0	32.682	5.6	ON STATION
74	4	10	0	32.682	5.5	ON STATION
74	4	11	0	32.698	5.3	ON STATION
74	4	12	0	32.697	5.2	ON STATION
74	4	13	0	32.683	5.4	ON STATION
74	4	14	0	32.712	5.1	ON STATION

OCEANOGRAPHIC OBSERVATIONS IN HOWE SOUND

1972



W.H. Bell

ENVIRONMENT CANADA
Fisheries and Marine Service
Marine Sciences Directorate
Pacific Region
1230 Government St.
Victoria, B.C.



MARINE SCIENCES DIRECTORATE, PACIFIC REGION

PACIFIC MARINE SCIENCE REPORT 74-7

OCEANOGRAPHIC OBSERVATIONS IN HOWE SOUND

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by

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Marine Sciences Directorate, Pacific Region

Environment Canada

May, 1974

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INTRODUCTION

The data presented in this report were collected during two cruises in Howe Sound in 1972. The stations occupied are shown in Figure 1. Stations 3, 4, 6 and 8 were 50-hour anchor stations, with a 2-hour sampling interval.

In the headings to the data tabulations, the dates are given in the form day-month-year, all times are Pacific Standard Time, the water depths are in metres, the barometer readings are in millibars, the wind information is given as azimuth (degrees) from true North/speed (knots), air temperatures are listed as dry bulb/wet bulb in Celsius degrees, Secchi disk readings are given as depth of disappearance (metres)/water color, and the wire angles are in degrees. Where the station number has the form X-Y, this represents an anchor station, with Cast No. Y at Station No. X.

The temperature ($^{\circ}\text{C}$), salinity ($^{\circ}/\text{oo}$), dissolved oxygen content (ml/l) and specific gravity anomaly (σ_t) are tabulated for the observed depths (metres). The surface temperatures (0 m) are the result of a single reading, to tenths of a degree, of a deck thermometer in a bucket sample. All other tabulated temperatures were obtained by averaging two corrected reversing-thermometer temperature readings (except where one thermometer of a pair malfunctioned or, in some instances, where the correction parameters could not be located). Salinity values were determined using an Auto-Lab Model 601 Inductively-Coupled

Salinometer to obtain conductivity ratios. Duplicate determinations were averaged and the average value was used in the salinity equation given on page 8 of the International Oceanographic Tables (published jointly by UNESCO and the National Institute of Oceanography, 1966). Accuracy of the method is reported to be $0.003^{\circ}/\text{oo}$ for the range above $28^{\circ}/\text{oo}$ and $0.02^{\circ}/\text{oo}$ below $28^{\circ}/\text{oo}$. The dissolved oxygen values were obtained from titrations done on shipboard following a modified Winkler method (Strickland and Parsons, 1965, A Manual of Sea Water Analysis). The precision of the method is about 0.03 ml/l. Sigma-t values were calculated, using the tabulated values of temperature and salinity, from Knudsen's formula as quoted by Fofonoff in his paper entitled Physical Properties of Sea-Water (The Sea, v. 1, 1962). Wherever any data are missing, the tabulated results are given as 0.0.

PERSONNEL

The vessel used during both cruises (February and June) was the CNAV LAYMORE, under Captain M. Dyer. Members of the vessel crew assisted directly in taking the observations on some watches.

The following staff from the Marine Sciences Branch (MSB) of the Department of the Environment stationed at the Pacific Environment Institute in West Vancouver, participated in the cruises:

R. Bigham (February)
R. Braun (Summer Student, June)
R. Forbes (February, June)
Dr. L. Giovando (In-charge, June)
J. Meikle (February, June)
A. Stickland (In-charge, February)
C. Whyte (Summer Student, June)

In addition, K. Gantzer (MSB) did most of the salinity determinations for both cruises and D. Noson (Institute of Oceanography, University of British Columbia) took part in the June cruise.

The assistance of all of the above mentioned personnel in making the cruises a success is gratefully acknowledged.

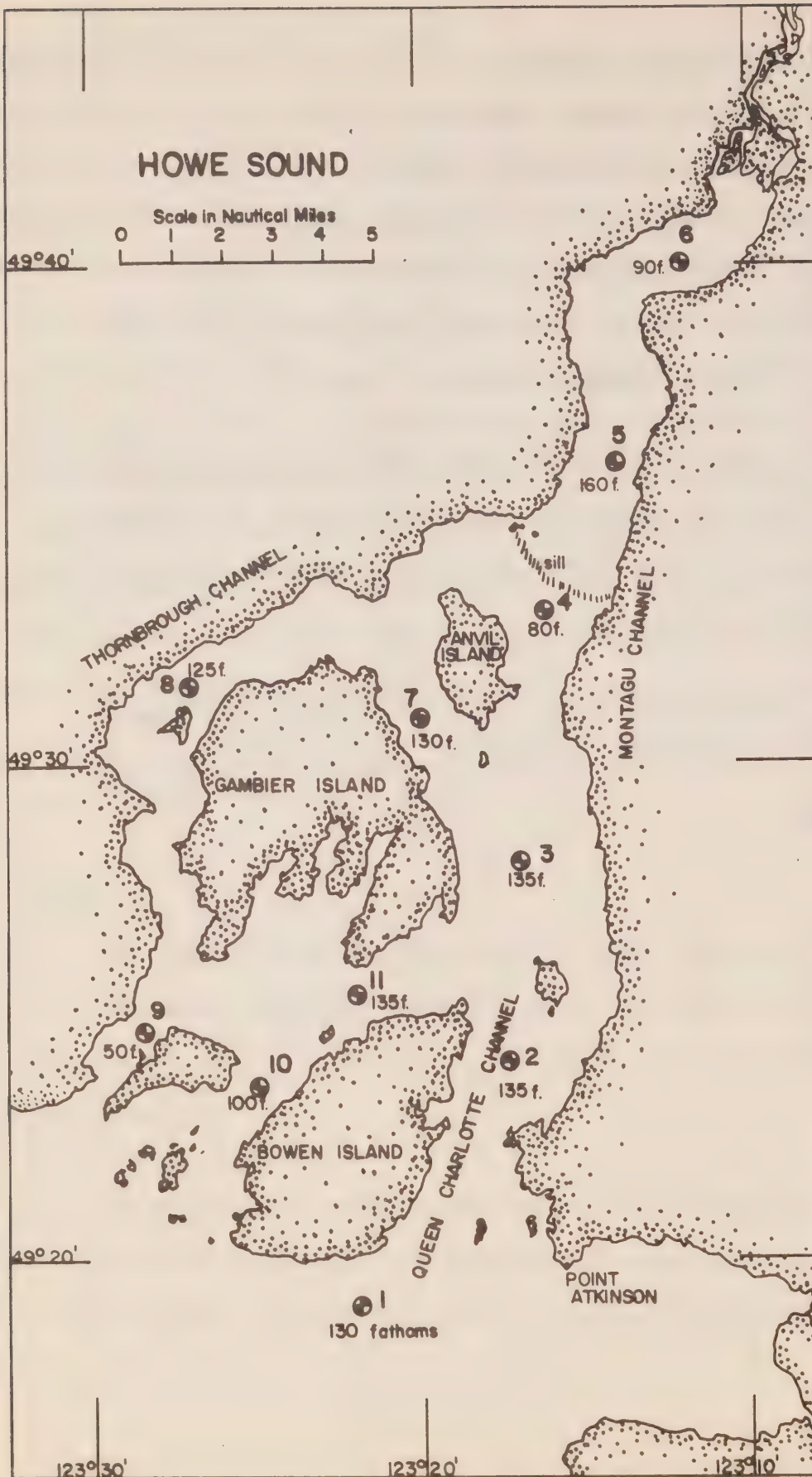


Figure 1. - Location of stations occupied in Howe Sound cruises

STN: 1 DATE: 22-2-72 TIME: 0920
LAT: 49°19'N LONG: 123°20'W DEPTH: 108 BARO: 1006.5
WIND: 100/3 AIR TEMP: 6.1/5.6 SECCHI: —

REFERENCE NUMBER- 72- 1- 1
WIRE ANGLE 4.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	26.625	6.890	21.063
2.	2.	5.47	26.690	6.790	21.087
5.	5.	5.89	27.479	6.360	21.665
10.	10.	6.14	27.907	5.680	21.973
20.	20.	7.25	30.044	5.230	23.516
30.	30.	6.79	30.056	5.620	23.585
50.	50.	6.42	30.071	5.890	23.642
75.	75.	6.26	30.110	5.960	23.692
100.	100.	6.14	30.164	6.040	23.748

STN: 2 DATE: 22-2-72 TIME: 1025
LAT: 49°24.1'N LONG: 123°17.4'W DEPTH: 188 BARO: 1007
WIND: 260/5 AIR TEMP: 7.2/6.1 SECCHI: 9/Dk. Green

REFERENCE NUMBER- 72- 1- 2
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	26.318	7.130	20.821
2.	2.	5.32	26.297	6.950	20.792
5.	5.	5.47	26.581	6.840	21.002
10.	10.	6.00	27.582	6.380	21.733
20.	20.	7.33	29.872	5.110	23.371
30.	30.	7.54	30.161	5.000	23.569
50.	50.	7.34	30.200	5.160	23.627
75.	75.	6.51	30.164	5.690	23.704
100.	100.	6.18	0.0	5.960	0.0
150.	150.	6.30	30.252	5.830	23.798
200.	200.	7.30	30.499	4.790	23.866
225.	225.	8.23	30.722	3.730	23.913

STN: 3-1 DATE: 22-2-72 TIME: 1310
 LAT: 49°27'N LONG: 123°17'W DEPTH: 245 BARO: 1008
 WIND: 0/0 AIR TEMP: 10.0/7.8 SECCHI: 10/Green

REFERENCE NUMBER- 72- 1- 3
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	25.551	7.180	20.197
2.	2.	5.29	26.041	7.030	20.594
5.	5.	5.54	26.801	6.650	21.168
10.	10.	5.83	27.465	6.340	21.660
20.	20.	7.66	30.084	4.840	23.493
30.	30.	7.52	30.185	5.110	23.591
50.	50.	7.07	30.200	5.320	23.662
75.	75.	7.01	30.237	5.340	23.699
100.	100.	6.67	30.232	5.510	23.738
150.	150.	6.43	30.241	5.710	23.774
200.	200.	7.67	30.551	4.450	23.858
225.	225.	8.07	30.689	3.870	23.910

STN: 3-2 DATE: 22-2-72 TIME: 1515
 LAT: 49°27'N LONG: 123°17'W DEPTH: 245 BARO: 1008.5
 WIND: 210/3 AIR TEMP: 11.7/8.9 SECCHI: 9/Green

REFERENCE NUMBER- 72- 1- 4
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.60	25.618	7.130	20.230
2.	2.	5.32	25.781	7.130	20.386
5.	5.	5.28	25.022	6.990	19.792
10.	10.	5.95	27.528	6.360	21.696
20.	20.	7.67	30.082	4.820	23.490
30.	30.	7.78	30.240	4.750	23.599
50.	50.	7.13	30.205	5.240	23.658
75.	75.	6.98	30.247	5.410	23.711
100.	100.	6.69	30.244	5.640	23.745
150.	150.	6.52	30.265	5.620	23.782
200.	200.	7.89	30.584	4.230	23.853
225.	225.	8.18	30.696	3.820	23.900

STN: 3-3 DATE: 22-2-72 TIME: 1710
 LAT: 49°27.4'N LONG: 123°15.5'W DEPTH: 245 BARO: 1009
 WIND: 340/3 AIR TEMP: 7.8/ SECCHI:

REFERENCE NUMBER- 72- 1- 5
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.60	25.335	0.0	20.007
2.	2.	5.36	25.834	0.0	20.424
5.	5.	5.49	25.943	0.0	20.497
10.	10.	6.04	27.894	0.0	21.974
20.	20.	7.62	30.086	0.0	23.500
30.	30.	7.75	30.211	0.0	23.581
50.	50.	7.09	30.212	0.0	23.669
75.	75.	6.96	30.248	0.0	23.714
100.	100.	6.39	30.208	0.0	23.753
150.	150.	6.52	30.259	0.0	23.777
200.	200.	7.98	30.617	0.0	23.867
225.	225.	8.00	30.688	0.0	23.919

STN: 3-4 DATE: 22-2-72 TIME: 1925
 LAT: 49°27.4'N LONG: 123°15.8'W DEPTH: 245 BARO: 1009
 WIND: 330/3 AIR TEMP: 6.1/5.6 SECCHI:

REFERENCE NUMBER- 72- 1- 6
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.50	25.242	7.260	19.944
2.	2.	5.47	26.063	7.010	20.594
5.	5.	5.56	26.298	6.900	20.770
10.	10.	5.95	27.264	6.560	21.489
20.	20.	7.54	30.030	4.910	23.467
30.	30.	7.70	30.230	4.880	23.602
50.	50.	7.16	30.217	5.170	23.663
75.	75.	6.97	30.244	5.380	23.709
100.	100.	6.39	30.198	5.680	23.745
150.	150.	6.44	30.255	5.680	23.784
200.	200.	8.06	30.626	4.140	23.861
225.	225.	8.34	30.734	3.620	23.907

STN: 3-5 DATE: 22-2-72 TIME: 2110
 LAT: 49°27.4'N LONG: 123°15.8'W DEPTH: 242 BARO: 1009.5
 WIND: 0/0 AIR TEMP: 6.1/5.6 SECCHI:

REFERENCE NUMBER- 72- 1- 7
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	25.293	7.250	20.003
2.	2.	5.37	26.271	6.960	20.767
5.	5.	5.65	26.693	6.720	21.071
10.	10.	5.91	27.686	6.330	21.825
20.	20.	7.70	30.103	4.730	23.503
30.	30.	7.68	30.212	4.880	23.591
50.	50.	7.18	30.205	5.300	23.652
75.	75.	6.96	30.233	5.370	23.702
100.	100.	6.37	30.203	5.670	23.751
150.	150.	6.57	30.261	5.590	23.773
200.	200.	8.11	30.643	3.990	23.869
225.	225.	7.67	30.717	3.700	23.988

STN: 3-6 DATE: 22-2-72 TIME: 2315
 LAT: 49°27.5'N LONG: 123°15.9'W DEPTH: 242 BARO: 1010
 WIND: 0/0 AIR TEMP: 5.8/5.3 SECCHI:

REFERENCE NUMBER- 72- 1- 8
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	25.283	7.180	19.996
2.	2.	5.53	25.931	7.100	20.483
5.	5.	5.58	26.449	6.800	20.886
10.	10.	5.64	27.170	6.550	21.448
20.	20.	7.12	29.569	5.280	23.161
30.	30.	7.72	30.187	4.710	23.565
50.	50.	7.11	30.202	5.260	23.659
75.	75.	6.97	30.242	5.340	23.708
100.	100.	6.40	30.197	5.680	23.743
150.	150.	6.49	30.256	5.660	23.778
200.	200.	8.21	30.665	3.790	23.872
225.	225.	8.24	30.712	3.700	23.904

STN: 3-7 DATE: 23-2-72 TIME: 0130
 LAT: 49° 27.4'N LONG: 123° 15.8'W DEPTH: 242 BARO: 1011
 WIND: 0/0 AIR TEMP: 4.4/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 9
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	24.631	7.170	19.473
2.	2.	5.67	25.145	7.060	19.852
5.	5.	5.36	26.184	6.950	20.699
10.	10.	5.72	27.078	6.580	21.367
20.	20.	7.24	29.710	5.140	23.256
30.	30.	7.69	30.187	4.820	23.570
50.	50.	7.06	30.200	5.320	23.663
75.	75.	6.95	30.246	5.370	23.714
100.	100.	6.28	30.182	5.820	23.746
150.	150.	6.44	30.243	5.690	23.774
200.	200.	8.24	30.681	3.800	23.880
225.	225.	8.19	30.708	3.800	23.908

STN: 3-8 DATE: 23-2-72 TIME: 0320
 LAT: 49° 27.8'N LONG: 123° 15.9'W DEPTH: 242 BARO: 1012
 WIND: 0/0 AIR TEMP: 4.4/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 10
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	23.619	7.250	18.676
2.	2.	5.58	26.229	6.930	20.713
5.	5.	5.64	26.797	6.670	21.154
10.	10.	5.74	27.048	6.620	21.341
20.	20.	7.38	29.880	5.000	23.371
30.	30.	7.70	30.197	4.820	23.576
50.	50.	6.99	30.200	5.470	23.672
75.	75.	6.96	30.259	5.360	23.722
100.	100.	6.30	30.182	5.750	23.743
150.	150.	6.47	30.238	5.650	23.767
200.	200.	8.06	30.624	4.040	23.860
225.	225.	8.15	30.711	3.780	23.915

STN: 3-9 DATE: 23-2-72 TIME: 0510
LAT: 49°27.8'N LONG: 123°15.8'W DEPTH: 243 BARO: 1013
WIND: 0/0 AIR TEMP: 5.0/414 SECCHI:

REFERENCE NUMBER- 72- 1- 11
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	24.084	7.190	19.042
2.	2.	5.55	25.630	7.110	20.244
5.	5.	5.57	26.150	6.930	20.652
10.	10.	5.58	26.648	6.780	21.042
20.	20.	7.63	30.083	4.810	23.496
30.	30.	7.71	30.195	4.770	23.573
50.	50.	6.98	30.200	5.410	23.673
75.	75.	7.02	30.262	5.300	23.717
100.	100.	6.36	30.187	5.840	23.740
150.	150.	6.43	30.245	5.730	23.778
200.	200.	7.57	30.560	4.450	23.878
225.	225.	8.13	30.728	3.730	23.932

STN: 3-10 DATE: 23-2-72 TIME: 0705
LAT: 49°27.7'N LONG: 123°15.7'W DEPTH: 243 BARO: 1013
WIND: 0/0 AIR TEMP: 4.4/3.9 SECCHI:

REFERENCE NUMBER- 72- 1- 12
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	24.481	7.180	19.355
2.	2.	5.61	25.471	7.060	20.114
5.	5.	5.55	26.063	6.970	20.586
10.	10.	5.69	27.166	6.510	21.439
20.	20.	7.48	29.958	5.000	23.419
30.	30.	7.74	30.186	4.740	23.562
50.	50.	6.99	30.209	5.410	23.680
75.	75.	6.96	30.243	5.360	23.710
100.	100.	6.34	30.195	6.290	23.749
150.	150.	6.56	30.274	5.630	23.784
200.	200.	7.57	30.564	4.500	23.882
225.	225.	8.00	30.681	3.930	23.914

STN: 3-11 DATE: 23-2-72 TIME: 0855
LAT: 49°27.8'N LONG: 123°15.7'W DEPTH: 243 BARO: 1013
WIND: 0/0 AIR TEMP: 5.6/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 13
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.50	24.174	7.140	19.103
2.	2.	5.56	26.164	7.010	20.664
5.	5.	5.55	26.484	6.850	20.917
10.	10.	5.86	27.402	6.450	21.607
20.	20.	7.60	30.011	4.850	23.445
30.	30.	7.75	30.200	4.730	23.572
50.	50.	7.02	30.194	5.350	23.664
75.	75.	6.98	30.234	5.360	23.700
100.	100.	6.34	30.195	5.750	23.748
150.	150.	6.42	30.235	5.720	23.770
200.	200.	7.67	30.568	4.330	23.871
225.	225.	8.22	30.703	3.720	23.899

STN: 3-12 DATE: 23-2-72 TIME: 1055
LAT: 49°27.8'N LONG: 123°15.6'W DEPTH: 243 BARO: 1013.5
WIND: 0/0 AIR TEMP: 7.2/6.1 SECCHI: 8/Green

REFERENCE NUMBER- 72- 1- 14
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.60	25.015	7.170	19.756
2.	2.	5.58	26.146	7.020	20.648
5.	5.	5.59	26.555	6.780	20.969
10.	10.	5.96	27.556	6.330	21.718
20.	20.	7.65	30.046	4.820	23.464
30.	30.	7.73	30.205	4.770	23.578
50.	50.	7.02	30.200	5.370	23.668
75.	75.	6.95	30.234	5.390	23.704
100.	100.	6.27	30.170	5.850	23.738
150.	150.	6.43	30.245	5.640	23.777
200.	200.	7.70	30.564	4.350	23.863
225.	225.	8.16	30.691	3.790	23.899

STN: 3-13 DATE: 23-2-72 TIME: 1310
LAT: 49°27.8'N LONG: 123°15.6'W DEPTH: 245 BARO: 1013.5
WIND: 0/0 AIR TEMP: 11.1/9.4 SECCHI: 10/Green

REFERENCE NUMBER- 72- 1- 15
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.80	24.328	7.190	19.196
2.	2.	5.63	26.315	6.980	20.776
5.	5.	5.63	26.750	6.720	21.118
10.	10.	5.93	27.416	6.380	21.610
20.	20.	7.57	30.048	4.820	23.477
30.	30.	7.74	30.183	4.730	23.559
50.	50.	7.11	30.214	5.260	23.668
75.	75.	6.96	30.222	5.370	23.693
100.	100.	6.25	30.165	5.830	23.736
150.	150.	6.44	30.246	5.690	23.777
200.	200.	7.80	30.579	4.290	23.862
225.	225.	8.19	30.696	3.780	23.898

STN: 3-14 DATE: 23-2-72 TIME: 1520
LAT: 49°27.6'N LONG: 123°15.7'N DEPTH: 245 BARO: 1013
WIND: 0/0 AIR TEMP: 9.4/7.2 SECCHI: 8/Green

REFERENCE NUMBER- 72- 1- 16
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	6.00	24.570	7.200	19.366
2.	2.	5.72	26.134	7.200	20.624
5.	5.	5.62	26.332	6.970	20.790
10.	10.	5.97	27.272	6.490	21.493
20.	20.	7.57	30.038	4.820	23.469
30.	30.	7.73	30.178	4.730	23.557
50.	50.	7.09	30.208	5.240	23.666
75.	75.	6.94	30.221	5.400	23.694
100.	100.	6.26	30.164	5.890	23.734
150.	150.	6.49	30.243	5.650	23.769
200.	200.	7.84	30.587	4.270	23.862
225.	225.	8.07	30.703	3.880	23.920

STN: 3-15 DATE: 23-2-72 TIME: 1710
LAT: 49°27.6'N LONG: 123°15.8'W DEPTH: 243 BARO: 1012
WIND: 130/2 AIR TEMP: 6.7/5.6 SECCHI:

REFERENCE NUMBER- 72- 1- 17
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.80	24.962	7.170	19.694
2.	2.	5.76	26.144	7.060	20.628
5.	5.	5.59	26.571	6.980	20.982
10.	10.	6.10	27.869	6.160	21.948
20.	20.	7.66	30.088	4.800	23.497
30.	30.	7.74	30.181	4.780	23.559
50.	50.	7.55	30.239	5.050	23.630
75.	75.	6.96	30.201	5.380	23.677
100.	100.	6.34	30.172	5.770	23.730
150.	150.	6.43	30.243	5.660	23.776
200.	200.	7.81	30.591	4.260	23.869
225.	225.	8.14	30.685	3.820	23.897

STN: 3-16 DATE: 32-2-72 TIME: 1910
LAT: 49°27.6'N LONG: 123°15.8'W DEPTH: 243 BARO: 1011.5
WIND: 0/0 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 18
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.70	25.849	7.080	20.402
2.	2.	5.60	26.430	6.950	20.870
5.	5.	5.59	26.653	6.720	21.046
10.	10.	6.14	27.830	6.190	21.913
20.	20.	7.53	29.980	4.910	23.429
30.	30.	7.74	30.162	4.740	23.543
50.	50.	7.45	30.240	5.090	23.644
75.	75.	6.99	30.222	5.430	23.689
100.	100.	6.40	30.172	5.730	23.723
150.	150.	6.40	30.234	5.680	23.772
200.	200.	7.84	30.574	4.290	23.852
225.	225.	8.35	30.718	3.580	23.893

STN: 3-17 DATE: 23-2-72 TIME: 2110
LAT: 49°27.6'N LONG: 123°15.8'W DEPTH: 243 BARO: 1011
WIND: 0/0 AIR TEMP: 5.0/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 19
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.60	25.529	7.120	20.160
2.	2.	5.69	26.069	7.060	20.576
5.	5.	5.58	26.525	6.840	20.946
10.	10.	6.07	27.895	6.170	21.972
20.	20.	7.59	29.961	5.020	23.406
30.	30.	7.73	30.188	4.760	23.565
50.	50.	7.16	30.218	5.270	23.664
75.	75.	6.97	30.218	5.560	23.689
100.	100.	6.39	30.190	5.780	23.739
150.	150.	6.50	30.259	5.640	23.780
200.	200.	7.81	30.583	4.280	23.863
225.	225.	8.42	30.771	3.370	23.924

STN: 3-18 DATE: 23-2-72 TIME: 2355
LAT: 49°28.1'N LONG: 123°16.1'W DEPTH: 243 BARO: 1010.5
WIND: 360/12 AIR TEMP: 5.0/3.9 SECCHI:

REFERENCE NUMBER- 72- 1- 20
WIRE ANGLE 15.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	25.168	7.180	19.895
2.	2.	5.62	25.326	7.120	19.998
5.	5.	5.59	26.221	6.840	20.706
10.	10.	6.02	27.805	6.190	21.906
19.	20.	7.67	30.114	4.790	23.515
29.	30.	7.74	30.197	4.740	23.570
48.	50.	7.21	30.226	5.220	23.664
72.	75.	6.94	30.217	5.410	23.691
97.	100.	6.46	30.194	5.700	23.733
145.	150.	6.58	30.268	5.620	23.777
193.	200.	7.80	30.602	4.270	23.879
217.	225.	8.25	30.717	3.670	23.906

STN: 3-19 DATE: 24-2-72 TIME: 0215
LAT: 49°27.3'N LONG: 123°15.8'W DEPTH: 244 BARO: 1010.5
WIND: 0/0 AIR TEMP: 5.0/3.9 SECCHI:

REFERENCE NUMBER- 72- 1- 21
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	24.441	7.230	19.359
2.	2.	5.57	26.436	6.930	20.877
5.	5.	5.65	26.780	6.670	21.140
10.	10.	5.87	27.366	6.400	21.578
20.	20.	7.58	29.924	5.000	23.379
30.	30.	7.73	30.199	4.790	23.573
50.	50.	7.51	30.242	5.000	23.637
75.	75.	6.85	30.223	5.490	23.708
100.	100.	6.76	30.226	5.510	23.722
150.	150.	6.26	30.214	5.850	23.773
200.	200.	7.91	30.626	4.130	23.883
225.	225.	8.24	30.705	3.730	23.898

STN: 3-20 DATE: 24-2-72 TIME: 0415
LAT: 49°27.3'N LONG: 123°15.8'W DEPTH: 244 BARO: 1010
WIND: 360/10 AIR TEMP: SECCHI:

REFERENCE NUMBER- 72- 1- 22
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.90	25.237	7.250	19.996
2.	2.	5.39	25.461	7.170	20.127
5.	5.	5.63	27.139	6.620	21.424
10.	10.	6.12	28.211	6.120	22.215
20.	20.	7.22	29.737	5.280	23.279
30.	30.	7.73	30.179	4.770	23.558
50.	50.	7.54	30.227	5.000	23.621
75.	75.	6.92	30.209	5.410	23.688
100.	100.	6.68	30.214	5.540	23.722
150.	150.	6.34	30.226	5.830	23.773
200.	200.	7.89	30.617	4.200	23.879
225.	225.	8.24	30.729	3.670	23.918

STN: 3-21 DATE: 24-2-72 TIME: 0615
LAT: 49°27.3'N LONG: 123°15.8'W DEPTH: 243 BARO: 1010
WIND: 360/5 AIR TEMP: 4.4/2.8 SECCHI:

REFERENCE NUMBER- 72- 1- 23
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.10	25.707	7.170	20.348
2.	2.	5.60	26.582	6.790	20.989
5.	5.	5.78	26.989	6.600	21.291
10.	10.	6.18	28.236	6.010	22.227
20.	20.	7.34	29.859	5.070	23.359
30.	30.	7.73	30.192	4.770	23.568
50.	50.	7.52	30.231	5.050	23.628
75.	75.	6.91	30.206	5.500	23.687
100.	100.	6.54	30.220	5.640	23.744
150.	150.	6.22	30.207	5.900	23.772
200.	200.	7.94	30.634	4.050	23.886
225.	225.	8.27	30.735	3.600	23.917

STN: 3-22 DATE: 24-2-72 TIME: 0815
LAT: 49°27.3'N LONG: 123°15.8'W DEPTH: 243 BARO: 1009.5
WIND: 360/5 AIR TEMP: 4.4/3.3 SECCHI:

REFERENCE NUMBER- 72- 1- 24
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	25.975	7.060	20.541
2.	2.	5.56	26.370	6.880	20.826
5.	5.	5.78	27.252	6.420	21.497
10.	10.	6.29	28.241	6.060	22.219
20.	20.	7.69	30.069	4.830	23.478
30.	30.	7.74	30.179	4.740	23.557
50.	50.	7.53	30.230	4.950	23.625
75.	75.	6.89	30.210	5.410	23.692
100.	100.	6.33	30.176	5.830	23.735
150.	150.	6.23	30.198	5.870	23.764
200.	200.	8.01	30.626	4.080	23.869
225.	225.	8.21	30.716	3.670	23.911

STN: 3-23 DATE: 24-2-72 TIME: 1015
LAT: 49°27.3'N LONG: 123°15.7'W DEPTH: 243 BARO: 1010
WIND: 360/3 AIR TEMP: 4.4/3.3 SECCHI: 8.5/Green

REFERENCE NUMBER- 72- 1- 25
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	26.354	6.970	20.839
2.	2.	5.62	26.702	6.800	21.081
5.	5.	5.89	27.301	6.450	21.524
10.	10.	6.54	0.0	6.010	0.0
20.	20.	7.67	30.075	4.820	23.485
30.	30.	7.73	0.0	4.750	0.0
50.	50.	7.56	0.0	4.950	0.0
75.	75.	6.87	30.210	5.470	23.696
100.	100.	6.35	0.0	5.770	0.0
150.	150.	6.23	30.202	5.920	23.768
200.	200.	7.78	0.0	4.290	0.0
225.	225.	8.22	30.717	3.690	23.910

STN: 3-24 DATE: 24-2-72 TIME: 1220
LAT: 49°27.3'N LONG: 123°15.8'W DEPTH: 244 BARO: 1010.5
WIND: 0/0 AIR TEMP: 6.1/3.9 SECCHI: 11/Green

REFERENCE NUMBER- 72- 1- 26
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.60	0.0	7.220	0.0
2.	2.	5.65	0.0	6.790	0.0
5.	5.	5.82	27.383	6.400	21.596
10.	10.	6.36	0.0	5.900	0.0
20.	20.	7.82	0.0	4.610	0.0
30.	30.	7.74	0.0	4.730	0.0
50.	50.	7.53	30.239	4.950	23.632
75.	75.	6.91	0.0	5.390	0.0
100.	100.	6.62	30.211	5.520	23.727
150.	150.	6.25	0.0	5.890	0.0
200.	200.	7.79	30.588	4.280	23.869
225.	225.	8.33	0.0	3.580	0.0

STN: 3-25 DATE: 24-2-72 TIME: 1415
 LAT: 49°27.3'N LONG: 123°15.8'W DEPTH: 243 BARO: 1010
 WIND: 200/10 AIR TEMP: 5.6/4.4 SECCHI: 10/Green

REFERENCE NUMBER- 72- 1- 27
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.80	0.0	7.190	0.0
2.	2.	5.67	0.0	6.840	0.0
5.	5.	5.04	0.0	7.180	0.0
10.	10.	6.49	0.0	5.870	0.0
20.	20.	7.70	0.0	4.770	0.0
30.	30.	7.73	0.0	4.770	0.0
50.	50.	7.67	0.0	4.920	0.0
75.	75.	6.91	0.0	5.470	0.0
100.	100.	6.67	0.0	5.640	0.0
150.	150.	6.37	30.220	5.760	23.765
200.	200.	8.09	0.0	3.870	0.0
225.	225.	8.27	30.724	3.690	23.909

STN: 4-1 DATE: 24-2-72 TIME: 1715
 LAT: 49°33.2'N LONG: 123°16.8'W DEPTH: 152 BARO: 1009
 WIND: 180/5 AIR TEMP: 5.0/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 28
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	25.311	7.070	20.008
2.	2.	5.38	25.468	7.030	20.134
5.	5.	5.54	26.482	6.600	20.916
10.	10.	5.97	27.890	6.190	21.979
20.	20.	7.41	29.921	5.130	23.398
30.	30.	7.63	30.168	4.840	23.563
50.	50.	7.76	30.284	4.630	23.637
75.	75.	7.11	30.275	5.080	23.716
100.	100.	7.42	30.349	4.940	23.732
140.	140.	6.81	30.277	5.430	23.756

STN: 4-2 DATE: 24-2-72 TIME: 1910
LAT: 49°33.1'N LONG: 123°16.6'W DEPTH: 146 BARO: 1009
WIND: 0/0 AIR TEMP: 5.6/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 29
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.704	6.890	20.337
2.	2.	5.43	26.083	6.760	20.613
5.	5.	5.54	26.448	6.590	20.890
10.	10.	6.00	28.064	6.070	22.113
20.	20.	7.45	30.008	5.130	23.461
30.	30.	7.67	30.197	4.750	23.580
50.	50.	7.60	30.240	4.800	23.624
75.	75.	7.50	30.293	4.830	23.678
100.	100.	7.26	30.317	5.100	23.729
140.	140.	7.09	30.315	0.0	23.750

STN: 4-3 DATE: 24-2-72 TIME: 2115
LAT: 49°33'N LONG: 123°16.5'W DEPTH: 150 BARO: 1009
WIND: 0/0 AIR TEMP: 5.0/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 30
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	24.785	7.100	19.631
2.	2.	5.42	25.907	6.820	20.475
5.	5.	5.48	26.116	6.700	20.634
10.	10.	6.54	28.862	5.640	22.678
20.	20.	7.51	30.023	4.980	23.465
30.	30.	7.65	30.208	4.740	23.592
50.	50.	7.74	30.252	4.660	23.613
75.	75.	7.49	30.289	4.830	23.677
100.	100.	7.61	30.344	4.800	23.704
140.	140.	7.70	30.410	4.750	23.743

STN: 4-4 DATE: 24-2-72 TIME: 2315
LAT: 49°33'N LONG: 123°16.4'W DEPTH: 150 BARO: 1009
WIND: 0/0 AIR TEMP: 5.6/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 31
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.10	24.764	7.100	19.605
2.	2.	5.39	25.791	6.850	20.387
5.	5.	5.54	26.386	6.560	20.841
10.	10.	6.61	29.082	5.550	22.842
20.	20.	7.60	30.101	4.850	23.515
30.	30.	7.67	30.206	4.710	23.588
50.	50.	7.62	30.249	4.790	23.628
75.	75.	7.51	30.314	4.850	23.693
100.	100.	7.68	30.372	4.630	23.715
140.	140.	7.64	30.426	4.600	23.764

STN: 4-5 DATE: 25-2-72 TIME: 0115
LAT: 49°33.1'N LONG: 123°16.7'W DEPTH: 150 BARO: 1009
WIND: 0/0 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 32
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	25.223	7.030	19.976
2.	2.	5.37	25.724	6.870	20.336
5.	5.	5.43	26.208	6.680	20.712
10.	10.	6.36	28.663	5.770	22.543
20.	20.	7.40	29.949	5.000	23.422
30.	30.	7.70	30.219	4.670	23.593
50.	50.	7.62	30.261	4.800	23.637
75.	75.	7.46	30.300	4.920	23.689
100.	100.	7.05	30.273	5.260	23.721
140.	140.	6.92	30.293	5.280	23.755

STN: 4-6 DATE: 25-2-72 TIME: 0315
LAT: 49°33.2'N LONG: 123°16.5'W DEPTH: 128 BARO: 1009
WIND: 230/10 AIR TEMP: 5.6/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 33
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.367	7.040	20.071
2.	2.	5.39	25.797	6.840	20.392
5.	5.	5.42	26.134	6.700	20.654
10.	10.	6.43	28.755	5.720	22.606
20.	20.	7.56	30.111	4.830	23.527
30.	30.	7.68	30.169	4.740	23.557
50.	50.	7.52	30.268	4.810	23.656
75.	75.	7.11	30.267	5.150	23.709
100.	100.	6.90	30.267	5.240	23.737

STN: 4-7 DATE: 25-2-72 TIME: 0510
LAT: 49°33.3'N LONG: 123°16.5'W DEPTH: 113 BARO: 1010
WIND: 195/10 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 34
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.267	7.020	19.992
2.	2.	5.26	25.306	6.980	20.017
5.	5.	5.42	25.991	6.720	20.542
10.	10.	6.39	28.747	5.710	22.605
20.	20.	7.45	29.992	4.890	23.450
30.	30.	7.67	30.195	4.720	23.579
50.	50.	7.61	30.256	4.750	23.635
75.	75.	7.39	30.298	4.860	23.697
100.	100.	7.05	30.281	5.170	23.729

STN: 4-8 DATE: 25-2-72 TIME: 0710
LAT: 49°33.4'N LONG: 123°16.6'W DEPTH: 124 BARO: 1010
WIND: 195/15 AIR TEMP: 5.0/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 35
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	25.445	6.970	20.123
2.	2.	5.31	25.448	6.930	20.125
5.	5.	5.35	25.849	6.800	20.436
10.	10.	5.25	27.608	6.280	21.833
20.	20.	7.18	29.674	5.140	23.235
30.	30.	7.64	30.152	4.850	23.550
50.	50.	7.70	30.254	4.680	23.620
75.	75.	7.47	30.285	4.820	23.676
100.	100.	7.11	30.280	5.110	23.720

STN: 4-9 DATE: 25-2-72 TIME: 0910
LAT: 49°33.4'N LONG: 123°16.6'W DEPTH: 117 BARO: 1011
WIND: 180/7 AIR TEMP: 5.6/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 36
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.730	7.040	20.357
2.	2.	5.31	25.681	7.020	20.308
5.	5.	5.58	26.492	6.700	20.920
10.	10.	6.20	28.347	5.940	22.312
20.	20.	7.39	29.887	5.010	23.374
30.	30.	7.62	30.149	4.800	23.549
50.	50.	7.67	30.249	4.720	23.622
75.	75.	7.44	30.273	4.890	23.670
100.	100.	7.12	30.274	5.190	23.713

STN: 4-10 DATE: 25-2-72 TIME: 1120
LAT: 49°33.2'N LONG: 123°16.5'N DEPTH: 104 BARO: 1012
WIND: 180/12 AIR TEMP: 5.6/4.4 SECCHI: 7/Dk. Green

REFERENCE NUMBER- 72- 1- 37
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.958	6.930	20.537
2.	2.	5.47	26.202	6.820	20.702
5.	5.	5.81	27.308	6.350	21.539
10.	10.	6.01	27.927	6.090	22.003
20.	20.	7.47	29.010	4.930	22.678
30.	30.	7.65	30.177	4.750	23.567
50.	50.	7.74	30.247	4.720	23.609
75.	75.	7.47	30.275	4.860	23.668
100.	100.	7.35	30.280	4.980	23.688

STN: 4-11 DATE: 25-2-72 TIME: 1310
LAT: 49°33.3'N LONG: 123°16.6'N DEPTH: 109 BARO: 1012
WIND: 180/10 AIR TEMP: 6.7/5.0 SECCHI: 8.5/Dk. Green

REFERENCE NUMBER- 72- 1- 38
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.787	7.000	20.402
2.	2.	5.36	25.777	6.990	20.379
5.	5.	5.57	26.372	6.720	20.826
10.	10.	5.98	28.040	6.090	22.096
20.	20.	7.46	29.993	4.940	23.448
30.	30.	7.66	30.175	4.800	23.565
50.	50.	7.72	30.254	4.700	23.618
75.	75.	7.41	30.263	4.950	23.667
100.	100.	7.12	30.262	5.230	23.704

STN: 4-12 DATE: 25-2-72 TIME: 1510
LAT: 49°33.3'N LONG: 123°16.5'W DEPTH: 119 BARO:
WIND: 200/15 AIR TEMP: 6.1/5.0 SECCHI: 7/Green

REFERENCE NUMBER- 72- 1- 39
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.486	7.050	20.165
2.	2.	5.40	25.946	6.890	20.509
5.	5.	5.53	26.207	6.720	20.701
10.	10.	6.22	28.214	6.020	22.206
20.	20.	6.32	29.824	5.130	23.460
30.	30.	7.66	30.170	4.760	23.560
50.	50.	7.67	30.248	4.720	23.621
75.	75.	7.21	30.261	5.080	23.692
100.	100.	7.12	30.261	5.250	23.703

STN: 4-13 DATE: 25-2-72 TIME: 1710
LAT: 49°33.2'N LONG: 123°16.5'W DEPTH: 128 BARO: 1011
WIND: 220/10 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 40
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.319	7.050	20.033
2.	2.	5.31	25.495	7.030	20.162
5.	5.	5.57	26.442	6.700	20.882
10.	10.	6.14	28.295	5.950	22.278
20.	20.	7.36	29.963	4.980	23.438
30.	30.	7.67	30.213	4.750	23.592
50.	50.	7.74	30.264	4.670	23.623
75.	75.	7.13	30.237	5.190	23.683
100.	100.	7.12	30.269	5.220	23.710

STN: 4-14 DATE: 25-2-72 TIME: 1910
LAT: 49°33.1'N LONG: 123°16.2'W DEPTH: 137 BARO: 1010
WIND: 215/10 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 41
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.10	24.062	7.110	19.052
2.	2.	5.26	24.078	7.070	19.050
5.	5.	5.75	27.042	6.440	21.335
10.	10.	6.24	28.365	5.930	22.322
20.	20.	7.27	29.812	5.140	23.332
30.	30.	7.66	30.183	4.780	23.571
50.	50.	7.27	30.236	4.750	23.665
75.	75.	7.48	30.261	4.900	23.655
100.	100.	7.15	30.281	5.090	23.715

STN: 4-15 DATE: 25-2-72 TIME: 2115
LAT: 49°33.3'N LONG: 123°16.4'W DEPTH: 128 BARO: 1010
WIND: 240/2 AIR TEMP: 6.1/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 42
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.10	24.966	7.160	19.764
2.	2.	5.28	25.221	7.060	19.949
5.	5.	5.29	25.326	7.010	20.030
10.	10.	6.20	28.122	6.070	22.136
20.	20.	7.31	29.739	5.260	23.269
30.	30.	7.66	30.176	4.750	23.565
50.	50.	7.63	30.230	4.810	23.611
75.	75.	7.39	30.264	4.990	23.670
100.	100.	7.20	30.265	5.190	23.696

STN: 4-16 DATE: 25-2-72 TIME: 2315
LAT: 49°33.2'N LONG: 123°16.4'W DEPTH: 132 BARO:
WIND: 245/8 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 43
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.10	25.103	7.080	19.872
2.	2.	5.29	25.339	7.010	20.040
5.	5.	5.41	25.844	6.850	20.427
10.	10.	5.82	27.526	6.280	21.709
20.	20.	7.22	29.788	5.100	23.320
30.	30.	7.67	30.175	4.710	23.563
50.	50.	7.63	30.255	4.770	23.631
75.	75.	7.15	30.242	5.130	23.684
100.	100.	7.28	30.300	4.990	23.712

STN: 4-17 DATE: 26-2-72 TIME: 0110
LAT: 49°33.1'N LONG: 123°16.4'W DEPTH: 137 BARO: 1009
WIND: 235/10 AIR TEMP: 5.7/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 44
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.213	7.100	19.950
2.	2.	5.26	25.204	7.030	19.937
5.	5.	5.35	25.733	6.970	20.345
10.	10.	5.48	26.236	6.800	20.729
20.	20.	7.06	29.626	5.260	23.213
30.	30.	7.69	30.198	4.720	23.579
50.	50.	7.62	30.255	4.840	23.633
75.	75.	7.17	30.249	5.240	23.687
100.	100.	7.36	30.315	5.000	23.715

STN: 4-18 DATE: 26-2-72 TIME: 0315
LAT: 49°31.3'N LONG: 123°16.5'W DEPTH: 113 BARO: 1009
WIND: 215/15 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 45
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.236	7.090	19.968
2.	2.	5.26	25.246	7.100	19.970
5.	5.	5.30	25.539	7.020	20.198
10.	10.	5.63	27.031	6.500	21.340
20.	20.	7.30	29.842	5.030	23.351
30.	30.	7.66	30.157	4.800	23.550
50.	50.	7.62	30.257	4.800	23.634
75.	75.	7.06	30.230	5.300	23.687
100.	100.	7.16	30.286	5.160	23.718

STN: 4-19 DATE: 26-2-72 TIME: 0510
LAT: 49°33.3'N LONG: 123°16.3'W DEPTH: 106 BARO: 1008
WIND: 200/15 AIR TEMP: 6.1/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 46
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.264	7.130	19.990
2.	2.	5.21	25.257	7.100	19.983
5.	5.	5.26	25.384	7.050	20.079
10.	10.	5.61	26.808	6.650	21.166
20.	20.	6.78	29.347	5.520	23.029
30.	30.	7.67	30.189	4.740	23.574
50.	50.	7.70	30.234	4.700	23.605
75.	75.	7.54	30.270	4.760	23.655
100.	100.	7.09	30.261	5.170	23.707

STN: 4-20 DATE: 26-2-72 TIME: 0710
LAT: 49°33.4'N LONG: 123°16.5'W DEPTH: 82 BARO: 1007.5
WIND: 215/18 AIR TEMP: 6.1/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 47
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	25.680	7.120	20.308
2.	2.	5.35	25.663	7.080	20.290
5.	5.	5.43	25.753	7.010	20.353
10.	10.	5.52	26.149	6.830	20.656
20.	20.	6.98	29.568	5.360	23.178
30.	30.	7.65	30.174	4.770	23.565
50.	50.	7.64	30.270	4.760	23.642
75.	75.	7.11	30.253	0.0	23.698
100.	100.	0.0	0.0	0.0	0.0

STN: 4-21 DATE: 26-2-72 TIME: 0920
LAT: 49°33.1'N LONG: 123°16.5'W DEPTH: 142 BARO: 1007.5
WIND: 180/20 AIR TEMP: 6.7/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 48
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	25.502	7.150	20.196
2.	2.	5.36	25.804	7.030	20.400
5.	5.	5.44	26.020	6.880	20.562
10.	10.	5.76	26.663	6.700	21.036
20.	20.	6.85	29.992	5.520	23.527
30.	30.	7.52	29.211	4.930	22.828
50.	50.	7.65	30.230	4.750	23.609
75.	75.	7.60	30.263	4.690	23.641
100.	100.	7.04	30.239	5.120	23.696

STN: 4-22 DATE: 26-2-72 TIME: 1120
LAT: 49°32.2'N LONG: 123°16.1'W DEPTH: 172 BARO: 1008
WIND: 180/12 AIR TEMP: 5.6/4.4 SECCHI: 7.5/Green

REFERENCE NUMBER- 72- 1- 49
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.929	7.050	20.514
2.	2.	5.43	25.980	6.980	20.532
5.	5.	5.71	26.554	6.700	20.956
10.	10.	5.80	27.198	6.490	21.453
20.	20.	6.81	29.281	3.670	22.974
30.	30.	7.58	30.071	4.870	23.494
50.	50.	7.73	30.246	4.740	23.611
75.	75.	7.34	30.237	5.040	23.656
100.	100.	7.04	30.267	5.270	23.719

STN: 4-23 DATE: 26-2-72 TIME: 1310
LAT: 49°32.0'N LONG: 123°16.6'W DEPTH: 164 BARO: 1007.5
WIND: 190/20 AIR TEMP: 6.1/5.7 SECCHI:

REFERENCE NUMBER- 72- 1- 50
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	25.583	7.100	20.232
2.	2.	5.51	25.570	7.100	20.201
5.	5.	5.56	25.718	7.030	20.313
10.	10.	6.00	27.426	6.400	21.611
20.	20.	6.99	29.522	5.380	23.140
30.	30.	7.34	30.101	4.820	23.549
50.	50.	7.59	30.223	4.920	23.611
75.	75.	7.42	30.252	4.980	23.656
100.	100.	7.03	30.243	5.360	23.701

STN: 4-24 DATE: 26-2-72 TIME: 1525
LAT: 49°32.5'N LONG: 123°16.4'W DEPTH: 164 BARO: 1007
WIND: 190/25 AIR TEMP: 6.7/5.6 SECCHI:

REFERENCE NUMBER- 72- 1- 51
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	25.910	7.040	20.480
2.	2.	5.57	25.918	7.030	20.469
5.	5.	5.59	26.138	6.920	20.640
10.	10.	5.76	26.725	6.680	21.085
20.	20.	6.99	29.191	5.580	22.881
30.	30.	7.61	30.113	4.820	23.522
50.	50.	7.58	30.230	4.910	23.619
75.	75.	7.34	30.220	5.040	23.642
100.	100.	7.02	30.227	5.360	23.690

STN: 4-25 DATE: 26-2-72 TIME: 1720
LAT: 49°33.2'N LONG: 123°16.1'W DEPTH: 168 BARO: 1008
WIND: 180/21 AIR TEMP: 6.7/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 52
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.10	25.802	7.100	20.423
2.	2.	5.33	25.773	7.040	20.379
5.	5.	5.33	25.767	7.000	20.374
10.	10.	5.54	26.294	6.780	20.768
20.	20.	6.47	28.776	5.780	22.618
30.	30.	7.40	29.953	4.980	23.425
50.	50.	7.61	30.220	4.850	23.606
75.	75.	7.16	30.202	5.180	23.651
100.	100.	6.98	30.213	5.330	23.684

STN: 5 DATE: 26-2-72 TIME: 1810
LAT: 49°35.9'N LONG: 123°14.2'W DEPTH: 276 BARO: 1008
WIND: 190/10 AIR TEMP: 5.0/5.0 SECCHI:

REFERENCE NUMBER- 72- 1- 53
WIRE ANGLE 14.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA--T
-0.	0.	5.30	25.789	7.120	20.394
2.	2.	5.44	25.834	7.100	20.416
5.	5.	5.45	25.849	7.030	20.427
10.	10.	5.46	25.857	7.030	20.432
19.	20.	5.13	26.674	6.650	21.108
29.	30.	7.48	30.024	4.870	23.470
49.	50.	7.83	30.275	4.000	23.619
73.	75.	7.80	30.285	4.400	23.631
97.	100.	7.80	30.318	4.230	23.657
146.	150.	8.16	30.503	3.430	23.752
194.	200.	8.30	30.430	2.850	23.675
243.	250.	8.35	30.507	2.730	23.727

STN: 6-1 DATE: 26-2-72 TIME: 1925
LAT: 49°40.2'N LONG: 123°11.8'W DEPTH: 145 BARO: 1008
WIND: 225/8 AIR TEMP: 3.9/3.9 SECCHI:

REFERENCE NUMBER- 72- 1- 54
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.90	8.855	8.340	7.100
2.	2.	5.18	24.240	7.080	19.185
5.	5.	5.22	25.113	7.000	19.869
10.	10.	5.27	25.548	6.990	20.207
20.	20.	5.82	27.276	6.350	21.512
30.	30.	7.20	29.790	5.040	23.323
50.	50.	7.83	30.267	4.560	23.613
75.	75.	7.95	30.317	4.300	23.636
100.	100.	7.88	30.339	4.100	23.662

STN: 6-2 DATE: 26-2-72 TIME: 2110
LAT: 49°40.2'N LONG: 123°11.8'W DEPTH: 145 BARO: 1007
WIND: 250/3 AIR TEMP: 5.0/4.4 SECCHI:

REFERENCE NUMBER- 72- 1- 55
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.80	9.202	8.050	7.379
2.	2.	5.28	24.758	6.940	19.584
5.	5.	5.29	25.218	6.990	19.945
10.	10.	5.29	25.562	6.970	20.216
20.	20.	6.01	27.902	6.140	21.984
30.	30.	7.38	29.959	4.940	23.433
50.	50.	7.82	30.270	4.520	23.617
75.	75.	7.96	30.311	4.270	23.630
100.	100.	7.95	30.330	4.110	23.646
125.	125.	7.91	30.345	4.080	23.664

STN: 6-3 DATE: 26-2-72 TIME: 2310
LAT: 49°40.3'N LONG: 123°11.8'W DEPTH: 146 BARO: 1007
WIND: 0/0 AIR TEMP: 3.3/3.3 SECCHI:

REFERENCE NUMBER- 72- 1- 56
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.80	8.683	8.250	6.966
2.	2.	5.16	23.816	7.030	18.852
5.	5.	5.28	25.285	7.010	19.999
10.	10.	5.31	25.624	6.960	20.264
20.	20.	6.35	28.825	5.640	22.671
30.	30.	7.51	30.036	4.770	23.476
50.	50.	7.81	30.233	4.620	23.590
75.	75.	7.95	30.313	4.190	23.633
100.	100.	7.97	30.332	4.000	23.644
125.	125.	7.92	30.339	4.030	23.658

STN: 6-4 DATE: 27-2-72 TIME: 0110
LAT: 49°40.2'N LONG: 123°11.9'W DEPTH: 153 BARO: 1004.5
WIND: 0/0 AIR TEMP: 2.2/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 57
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.90	9.892	8.040	7.924
2.	2.	5.26	24.574	6.980	19.441
5.	5.	5.28	25.464	6.930	20.140
10.	10.	5.30	25.640	6.940	20.277
20.	20.	6.63	29.250	5.500	22.972
30.	30.	7.56	30.081	4.790	23.504
50.	50.	7.88	30.261	4.580	23.602
75.	75.	7.96	30.321	4.240	23.637
100.	100.	7.91	30.336	4.160	23.657
125.	125.	7.85	30.338	4.140	23.666

STN: 6-5 DATE: 27-2-72 TIME: 0315
LAT: 49°40.2'N LONG: 123°12.1'W DEPTH: 155 BARO: 1001
WIND: 070/5 AIR TEMP: 1.1/1.1 SECCHI:

REFERENCE NUMBER- 72- 1- 58
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.80	11.571	8.020	9.260
2.	2.	5.26	25.101	7.200	19.855
5.	5.	5.30	25.379	6.960	20.072
10.	10.	5.32	25.538	6.950	20.195
20.	20.	6.61	29.201	5.560	22.936
30.	30.	7.67	30.163	4.820	23.553
50.	50.	7.85	30.270	4.660	23.612
75.	75.	8.00	30.325	4.130	23.635
100.	100.	7.65	30.297	4.440	23.661
125.	125.	7.71	30.309	4.460	23.662

STN: 6-6 DATE: 27-2-72 TIME: 0510
LAT: 49°40.1'N LONG: 123°12.1'W DEPTH: 161 BARO: 995.5
WIND: 065/8 AIR TEMP: 1.1/1.1 SECCHI:

REFERENCE NUMBER- 72- 1- 59
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.10	12.329	7.990	9.884
2.	2.	5.22	24.821	6.910	19.639
5.	5.	5.25	25.356	6.910	20.057
10.	10.	5.34	25.676	6.870	20.301
20.	20.	6.36	28.971	5.640	22.784
30.	30.	7.69	30.192	4.700	23.573
50.	50.	7.96	30.321	4.350	23.638
75.	75.	7.84	30.331	4.190	23.662
100.	100.	7.67	30.300	4.470	23.661
125.	125.	7.67	30.336	4.370	23.689

STN: 6-7 DATE: 27-2-72 TIME: 0710
LAT: 49°40'N LONG: 123+12.2'W DEPTH: 161 BARO: 993
WIND: 50/5 AIR TEMP: 0.6 /0.6 SECCHI:

REFERENCE NUMBER- 72- 1- 60
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	2.10	9.020	8.200	7.257
2.	2.	5.24	24.100	6.990	19.069
5.	5.	5.27	25.415	6.890	20.103
10.	10.	5.38	25.729	6.770	20.340
20.	20.	6.99	29.641	5.150	23.234
30.	30.	7.68	30.173	4.720	23.561
50.	50.	7.90	30.288	4.450	23.620
75.	75.	7.79	30.328	4.160	23.666
100.	100.	7.68	30.305	4.420	23.663
125.	125.	7.86	30.345	4.190	23.670

STN: 6-8

DATE: 27-2-72

TIME: 0915

LAT: 49°40'N

LONG: 123°12.2'W

DEPTH: 160

BARO: 991

WIND: 0/0

AIR TEMP: 1.1/0.6

SECCHI:

REFERENCE NUMBER- 72- 1- 61

WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.10	11.964	7.920	9.594
2.	2.	5.27	25.254	6.980	19.976
5.	5.	5.29	25.550	6.940	20.207
10.	10.	5.39	25.725	6.770	20.335
20.	20.	7.10	29.706	5.090	23.271
30.	30.	7.68	30.171	4.710	23.558
50.	50.	7.92	30.292	4.440	23.620
75.	75.	7.99	30.337	4.010	23.646
100.	100.	7.68	30.309	4.460	23.666
125.	125.	7.91	30.366	4.000	23.680

STN: 6-9

DATE: 27-2-72

TIME: 1120

LAT: 49°40'N

LONG: 123°12.2'W

DEPTH: 160

BARO: 991

WIND: 0/0

AIR TEMP: 2.2/1.7

SECCHI: 2.5/Green-yellow

REFERENCE NUMBER- 72- 1- 62

WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	2.90	10.793	8.090	8.666
2.	2.	5.30	25.391	7.050	20.081
5.	5.	5.32	25.532	6.950	20.190
10.	10.	5.41	25.802	6.820	20.394
20.	20.	7.40	29.988	4.850	23.453
30.	30.	7.70	30.197	4.690	23.576
50.	50.	7.95	30.289	4.400	23.614
75.	75.	7.97	30.318	4.030	23.634
100.	100.	7.66	30.288	4.480	23.652
125.	125.	7.84	30.328	4.230	23.659

STN: 6-10 DATE: 27-2-72 TIME: 2120
LAT: 49°40'N LONG: 123°12'W DEPTH: 135 BARO: 1002
WIND: 180/7 AIR TEMP: 10.0/9.4 SECCHI:

REFERENCE NUMBER- 72- 1- 63
WIRE ANGLE 11.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.90	21.397	7.340	16.968
2.	2.	4.97	21.090	7.320	16.721
5.	5.	5.18	23.460	7.070	18.571
10.	10.	5.28	24.979	7.000	19.758
20.	20.	5.39	25.757	6.850	20.361
29.	30.	6.82	29.451	5.330	23.105
49.	50.	7.75	30.236	4.580	23.600
74.	75.	7.95	30.311	4.230	23.631
98.	100.	7.89	30.319	4.120	23.646

STN: 6-11 DATE: 27-2-72 TIME: 2310
LAT: 49°40.2'N LONG: 123°12'W DEPTH: 124 BARO: 1002
WIND: 180/7 AIR TEMP: 7.8/7.2 SECCHI:

REFERENCE NUMBER- 72- 1- 64
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.50	18.260	7.460	14.521
2.	2.	5.13	23.078	7.080	18.274
5.	5.	5.22	24.010	7.030	19.000
10.	10.	5.26	24.821	6.990	19.635
20.	20.	5.40	25.864	6.870	20.443
30.	30.	7.04	29.604	5.210	23.198
50.	50.	7.79	30.222	4.630	23.584
75.	75.	7.95	30.328	4.100	23.645
100.	100.	7.91	30.341	4.040	23.660

STN: 6-12 DATE: 28-2-72 TIME: 0110
LAT: 49°40'N LONG: 123°12.2'W DEPTH: 165 BARO: 1003
WIND: 0/0 AIR TEMP: 5.6/5.6 SECCHI:

REFERENCE NUMBER- 72- 1- 65
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.00	10.552	8.100	8.445
2.	2.	5.13	22.975	7.190	18.193
5.	5.	5.30	24.647	7.070	19.495
10.	10.	5.33	24.990	7.040	19.762
20.	20.	5.80	27.023	6.530	21.316
30.	30.	7.40	29.917	4.980	23.396
50.	50.	7.82	30.236	4.650	23.591
75.	75.	7.95	30.303	4.170	23.624
100.	100.	7.96	30.325	4.160	23.641
125.	125.	7.87	30.330	4.190	23.658

STN: 6-13 DATE: 28-2-72 TIME: 0325
LAT: 49°40.2'N LONG: 123°12'W DEPTH: 153 BARO: 1002.5
WIND: 0/0 AIR TEMP: 5.6/5.6 SECCHI:

REFERENCE NUMBER- 72- 1- 66
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.90	10.526	7.990	8.428
2.	2.	5.22	23.797	7.100	18.833
5.	5.	5.29	24.616	7.030	19.471
10.	10.	5.34	25.272	6.940	19.983
20.	20.	6.96	29.514	5.260	23.138
30.	30.	7.63	30.127	4.780	23.530
50.	50.	7.89	30.260	4.520	23.600
75.	75.	7.95	30.301	4.190	23.624
100.	100.	7.93	30.318	4.230	23.639
125.	125.	7.85	30.325	4.160	23.656

STN: 6-14 DATE: 28-2-72 TIME: 0510
LAT: 49°40.3'N LONG: 123°12'W DEPTH: 154 BARO: 1001
WIND: 0/0 AIR TEMP: 3.9/3.9 SECCHI:

REFERENCE NUMBER- 72- 1- 67
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.60	8.651	8.360	6.946
2.	2.	5.24	24.449	7.050	19.344
5.	5.	5.29	24.929	7.010	19.718
10.	10.	5.33	25.490	6.920	20.155
20.	20.	7.08	29.611	5.270	23.198
30.	30.	7.68	30.160	4.730	23.551
50.	50.	7.80	30.259	4.680	23.611
75.	75.	7.94	30.322	4.190	23.641
100.	100.	7.71	30.304	4.330	23.659
125.	125.	7.82	30.321	4.270	23.657

STN: 6-15 DATE: 28-2-72 TIME: 0720
LAT: 49°40.1'N LONG: 123°11.5'W DEPTH: 132 BARO: 999
WIND: 060/8 AIR TEMP: 3.3/3.3 SECCHI:

REFERENCE NUMBER- 72- 1- 68
WIRE ANGLE 13.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.20	8.711	8.210	7.001
2.	2.	5.23	23.216	7.130	18.374
5.	5.	5.31	24.874	6.970	19.672
10.	10.	5.36	25.222	6.980	19.942
19.	20.	7.09	29.643	5.230	23.222
29.	30.	7.66	30.148	4.770	23.544
49.	50.	7.87	30.290	4.460	23.625
73.	75.	7.93	30.336	4.170	23.653
97.	100.	7.93	30.338	4.100	23.656
122.	125.	7.84	30.344	4.210	23.672

STN: 6-16 DATE: 28-2-72 TIME: 0920
LAT: 49°40.1'N LONG: 123°12'W DEPTH: 165 BARO: 1000
WIND: 0/0 AIR TEMP: 3.3/2.8 SECCHI:

REFERENCE NUMBER- 72- 1- 69
WIRE ANGLE 3.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.80	13.894	7.760	11.103
2.	2.	5.21	23.623	7.100	18.697
5.	5.	5.30	24.841	6.960	19.647
10.	10.	5.32	25.469	6.980	20.140
20.	20.	7.12	29.666	5.150	23.237
30.	30.	7.59	30.106	4.800	23.520
50.	50.	7.86	30.285	4.500	23.623
75.	75.	7.96	30.334	4.030	23.648
100.	100.	7.65	30.299	4.550	23.663
125.	125.	7.73	30.305	4.470	23.657

STN: 6-17 DATE: 28-2-72 TIME: 1110
LAT: 49°40.2'N LONG: 123°12'W DEPTH: BARO: 1000
WIND: 0/0 AIR TEMP: 3.3/2.8 SECCHI: 6.5/Green-brown

REFERENCE NUMBER- 72- 1- 70
WIRE ANGLE 2.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.50	19.110	7.570	15.192
2.	2.	5.25	0.0	6.980	0.0
5.	5.	5.30	24.900	6.960	19.694
10.	10.	5.32	25.459	6.990	20.133
20.	20.	7.14	29.738	5.170	23.291
30.	30.	7.67	30.162	4.680	23.553
50.	50.	7.84	30.283	4.380	23.624
75.	75.	7.98	0.0	3.910	0.0
100.	100.	7.68	30.295	4.510	23.656
150.	150.	8.06	30.395	3.710	23.681

STN: 6-18 DATE: 28-2-72 TIME: 1315
LAT: 49°40.1'N LONG: 123°12.1'W DEPTH: 165 BARO: 998
WIND: 060/5 AIR TEMP: 2.8/2.8 SECCHI: 4/yellow-green

REFERENCE NUMBER- 72- 1- 71
WIRE ANGLE 10.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.80	12.216	8.040	9.772
2.	2.	5.24	24.195	7.080	19.144
5.	5.	5.34	25.002	7.100	19.771
10.	10.	5.39	25.703	6.900	20.318
20.	20.	7.15	29.717	5.230	23.272
30.	30.	7.70	30.175	4.770	23.559
49.	50.	7.89	30.281	4.350	23.615
74.	75.	7.94	30.321	4.100	23.640
98.	100.	7.70	30.310	4.420	23.665
123.	125.	7.93	30.368	3.950	23.679

STN: 6-19 DATE: 28-2-72 TIME: 1515
LAT: 49°40.2'N LONG: 123°11.4'W DEPTH: 134 BARO: 995
WIND: 060/5 AIR TEMP: 3.9/3.9 SECCHI: 4/green

REFERENCE NUMBER- 72- 1- 72
WIRE ANGLE 12.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	3.90	14.597	7.850	11.656
2.	2.	5.19	23.558	7.070	18.647
5.	5.	5.32	24.974	7.030	19.750
10.	10.	5.35	25.487	6.960	20.151
20.	20.	7.02	29.623	5.250	23.215
29.	30.	7.63	30.134	4.820	23.536
49.	50.	7.87	30.278	4.440	23.616
73.	75.	7.88	30.308	4.190	23.639
98.	100.	7.82	30.325	4.180	23.660
122.	125.	7.99	30.385	3.710	23.683

STN: 6-20 DATE: 28-2-72 TIME: 1725
LAT: 49°40.1'N LONG: 123°11.8'W DEPTH: 150 BARO: 992
WIND: 060/5 AIR TEMP: 3.9/3.9 SECCHI:

REFERENCE NUMBER- 72- 1- 73
WIRE ANGLE 15.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA--T
-0.	0.	4.60	20.631	7.390	16.386
2.	2.	5.27	24.284	7.060	19.211
5.	5.	5.33	25.010	7.060	19.778
10.	10.	5.38	25.627	6.930	20.259
19.	20.	6.89	29.514	5.290	23.146
29.	30.	7.53	30.044	4.840	23.479
48.	50.	7.72	30.216	4.690	23.588
72.	75.	7.93	30.303	4.190	23.627
97.	100.	7.89	30.325	4.160	23.650
121.	125.	7.72	30.317	4.390	23.667

STN: 6-21 DATE: 28-2-72 TIME: 1920
LAT: 49 40.1'N LONG: 123°12'W DEPTH: 143 BARO: 989
WIND: AIR TEMP: SECCHI:

REFERENCE NUMBER- 72- 1- 74
WIRE ANGLE 13.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.40	20.485	7.380	16.285
2.	2.	5.25	24.280	7.100	19.211
5.	5.	5.36	25.244	6.920	19.959
10.	10.	5.40	25.746	6.820	20.350
19.	20.	7.13	29.727	5.260	23.283
29.	30.	7.47	30.001	4.820	23.454
49.	50.	7.76	30.245	4.610	23.606
73.	75.	7.96	30.316	4.160	23.634
97.	100.	7.87	30.323	4.100	23.652
122.	125.	7.86	30.335	4.080	23.662

STN: 6-22 DATE: 28-2-72 TIME: 2120
LAT: 49°40'N LONG: 123°12'W DEPTH: 154 BARO: 991
WIND: 0/0 AIR TEMP: 2.2/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 75
WIRE ANGLE 3.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.00	16.940	7.680	13.507
2.	2.	5.23	24.082	7.030	19.056
5.	5.	5.30	25.233	6.880	19.956
10.	10.	5.61	26.521	6.490	20.940
20.	20.	7.17	29.803	5.080	23.338
30.	30.	7.51	30.047	4.770	23.484
50.	50.	7.74	30.238	4.690	23.603
75.	75.	7.96	30.348	4.170	23.659
100.	100.	7.79	30.315	4.190	23.656
125.	125.	7.89	30.346	4.090	23.666

STN: 7 DATE: 28-2-72 TIME: 2305
LAT: 49°31'N LONG: 123°20'W DEPTH: 227 BARO: 989
WIND: 330/8 AIR TEMP: 1.7/1.1 SECCHI:

REFERENCE NUMBER- 72- 1- 76
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	24.447	7.190	19.337
2.	2.	5.48	24.975	7.110	19.736
5.	5.	5.58	26.090	6.780	20.604
10.	10.	5.67	26.533	6.630	20.943
20.	20.	6.83	29.392	5.530	23.058
30.	30.	7.14	30.140	4.750	23.606
50.	50.	7.28	30.192	4.720	23.628
75.	75.	7.52	30.269	4.810	23.656
100.	100.	6.98	30.236	5.260	23.702
150.	150.	7.80	30.491	4.500	23.793
200.	200.	8.08	30.630	3.870	23.862

STN: 8-1 DATE: 29-2-72 TIME: 0110
LAT: 49°31.5'N LONG: 123°27.2'W DEPTH: 228 BARO: 993
WIND: 0/0 AIR TEMP: 7.8/7.8 SECCHI:

REFERENCE NUMBER- 72- 1- 77
WIRE ANGLE 7.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	18.273	7.610	14.497
2.	2.	5.34	24.890	7.110	19.682
5.	5.	5.47	25.680	6.900	20.291
10.	10.	5.58	26.494	6.650	20.921
20.	20.	6.66	29.346	5.540	23.043
30.	30.	7.62	30.096	4.720	23.507
50.	50.	7.86	30.254	4.580	23.600
74.	75.	7.92	30.336	4.400	23.655
99.	100.	8.14	30.421	4.120	23.690
149.	150.	8.22	30.534	3.950	23.767
199.	200.	8.14	30.631	3.760	23.855

STN: 8-2 DATE: 29-2-72 TIME: 0315
LAT: 49°31.5'N LONG: 123°27.3'W DEPTH: 227 BARO: 995
WIND: 0/0 AIR TEMP: 5.6/5.6 SECCHI:

REFERENCE NUMBER- 72- 1- 78
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.30	12.792	7.850	10.208
2.	2.	5.44	25.349	6.960	20.034
5.	5.	5.47	25.735	6.880	20.335
10.	10.	5.55	26.199	6.770	20.693
20.	20.	6.83	29.369	5.490	23.040
30.	30.	7.62	30.103	4.750	23.513
50.	50.	7.91	30.249	4.550	23.588
75.	75.	8.02	30.360	4.280	23.660
100.	100.	8.14	30.424	4.090	23.692
150.	150.	8.14	30.504	4.070	23.756
200.	200.	8.20	30.637	3.670	23.851

STN: 8-3 DATE: 29-2-72 TIME: 0520
LAT: 49°31.5'N LONG: 123°26.9'W DEPTH: 230 BARO: 997.5
WIND: 220/10 AIR TEMP: 5.8/5.8 SECCHI:

REFERENCE NUMBER- 72- 1- 79
WIRE ANGLE 7.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	21.041	7.380	16.679
2.	2.	5.38	23.939	7.050	18.929
5.	5.	5.43	25.107	6.960	19.844
10.	10.	5.58	26.404	6.680	20.850
20.	20.	7.24	29.486	5.330	23.080
30.	30.	7.76	30.147	4.680	23.529
50.	50.	7.80	30.266	4.560	23.616
74.	75.	7.84	30.280	4.580	23.622
99.	100.	7.74	30.342	4.600	23.685
149.	150.	8.27	30.528	3.940	23.755
199.	200.	8.01	30.584	4.030	23.837

STN: 8-4 DATE: 29-2-72 TIME: 0720
LAT: 49°31.6'N LONG: 123°26.7'W DEPTH: 231 BARO: 999
WIND: 240/5 AIR TEMP: SECCHI:

REFERENCE NUMBER- 72- 1- 80
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.10	13.886	7.880	11.084
2.	2.	5.44	25.033	7.010	19.786
5.	5.	5.50	25.684	6.870	20.292
10.	10.	5.60	26.394	6.800	20.841
20.	20.	6.76	29.524	5.380	23.170
30.	30.	7.66	30.095	4.770	23.501
50.	50.	7.80	30.261	4.590	23.612
75.	75.	8.05	30.369	4.240	23.663
100.	100.	8.13	30.432	4.110	23.700
150.	150.	8.01	30.510	4.240	23.778
200.	200.	8.14	30.622	3.760	23.847

STN: 8-5

DATE: 29-2-72

TIME: 0915

LAT: 49°31.6'N

LONG: 123°26.6'W

DEPTH: 230

BARO: 1002

WIND: 0/0

AIR TEMP: 5.0/4.4

SECCHI:

REFERENCE NUMBER- 72- 1- 81

WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.80	19.743	7.350	15.671
2.	2.	5.45	24.706	6.980	19.527
5.	5.	5.52	25.630	6.890	20.247
10.	10.	5.57	26.306	6.710	20.775
20.	20.	7.17	29.793	5.130	23.330
30.	30.	7.73	30.159	4.630	23.543
50.	50.	7.79	30.252	4.660	23.607
75.	75.	7.81	30.309	4.450	23.649
100.	100.	8.11	30.411	4.190	23.687
150.	150.	8.29	30.525	3.950	23.750
200.	200.	8.11	30.612	3.800	23.844

STN: 8-6

DATE: 29-2-72

TIME: 1110

LAT: 49°31.6'N

LONG: 123°26.6'W

DEPTH: 230

BARO: 1007

WIND: 0/0

AIR TEMP: 5.0/4.4

SECCHI: 3.5/brown

REFERENCE NUMBER- 72- 1- 82

WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.90	20.250	7.390	16.063
2.	2.	5.48	25.078	6.950	19.817
5.	5.	5.51	25.254	6.940	19.953
10.	10.	5.60	26.540	6.610	20.955
20.	20.	7.11	29.755	5.130	23.308
30.	30.	7.71	30.147	4.660	23.536
50.	50.	7.78	30.246	4.700	23.603
75.	75.	7.90	30.319	4.350	23.644
100.	100.	8.15	30.417	4.080	23.686
150.	150.	8.17	30.511	3.970	23.757
200.	200.	8.16	30.623	3.670	23.846

STN: 8-7 DATE: 29-2-72 TIME: 1310
LAT: 49°31.6'N LONG: 123°27.3'W DEPTH: 230 BARO: 1010.5
WIND: 0/0 AIR TEMP: 10.0/6.1 SECCHI: 5.5/brown

REFERENCE NUMBER- 72- 1- 83
WIRE ANGLE 13.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.50	19.749	7.480	15.622
2.	2.	5.48	24.611	6.960	19.450
5.	5.	5.53	25.872	6.860	20.437
10.	10.	5.70	26.832	6.540	21.176
19.	20.	7.48	30.025	4.770	23.471
29.	30.	7.81	30.200	4.540	23.564
49.	50.	7.80	30.250	4.610	23.604
73.	75.	7.60	30.263	4.790	23.641
97.	100.	8.00	30.386	4.330	23.682
146.	150.	8.12	30.510	4.140	23.763
195.	200.	7.97	30.609	3.920	23.861

STN: 8-8 DATE: 29-2-72 TIME: 1510
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 230 BARO: 1014
WIND: 200/10 AIR TEMP: 6.7/2.8 SECCHI: 5.5/brown

REFERENCE NUMBER- 72- 1- 84
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	23.020	7.190	18.204
2.	2.	5.54	24.811	7.030	19.601
5.	5.	5.57	25.684	6.870	20.285
10.	10.	5.59	26.309	6.690	20.775
20.	20.	7.02	29.678	5.320	23.258
30.	30.	7.72	30.172	4.660	23.555
50.	50.	7.78	30.253	4.640	23.609
75.	75.	7.71	30.291	4.570	23.649
100.	100.	7.83	30.361	4.490	23.687
150.	150.	8.13	30.515	4.060	23.765
200.	200.	8.10	30.608	3.850	23.842

STN: 8-9 DATE: 29-2-72 TIME: 1715
LAT: 49°31.6'N LONG: 123°27'W DEPTH: 230 BARO: 1017
WIND: 220/7 AIR TEMP: 5.0/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 85
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.40	23.391	7.150	18.496
2.	2.	5.62	25.402	7.040	20.058
5.	5.	5.56	25.804	6.880	20.380
10.	10.	5.57	26.336	6.740	20.798
20.	20.	7.65	29.757	5.190	23.238
30.	30.	7.66	30.174	4.620	23.563
50.	50.	7.72	30.234	4.770	23.603
75.	75.	7.79	30.278	4.640	23.627
100.	100.	8.26	30.347	4.480	23.615
150.	150.	8.26	30.537	3.940	23.764
200.	200.	8.11	30.602	3.830	23.836

STN: 8-10 DATE: 29-2-72 TIME: 1925
LAT: 49°31.6'N LONG: 123°26.7'W DEPTH: 232 BARO: 1018.5
WIND: 235/6 AIR TEMP: 3.9/1.7 SECCHI:

REFERENCE NUMBER- 72- 1- 86
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.30	23.563	7.170	18.641
2.	2.	5.51	24.292	7.050	19.195
5.	5.	5.56	25.476	6.880	20.123
10.	10.	5.76	27.186	6.400	21.448
20.	20.	7.15	29.795	5.130	23.334
30.	30.	7.79	30.179	4.630	23.549
50.	50.	7.76	30.248	4.700	23.608
75.	75.	7.58	30.257	4.730	23.639
100.	100.	7.69	30.323	4.640	23.676
150.	150.	8.04	30.479	4.280	23.750
200.	200.	8.05	30.584	3.870	23.830

STN: 8-11 DATE: 29-2-72 TIME: 2115
LAT: 49+30.5'N LONG: 123°27'W DEPTH: 227 BARO: 1020
WIND: 0/0 AIR TEMP: 3.9/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 87
WIRE ANGLE 3.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.80	22.115	7.290	17.542
2.	2.	5.50	25.067	7.020	19.807
5.	5.	5.55	25.778	6.820	20.361
10.	10.	5.78	27.128	6.420	21.400
20.	20.	7.01	29.682	5.220	23.264
30.	30.	7.72	30.138	4.620	23.527
50.	50.	7.78	30.235	4.660	23.595
75.	75.	7.58	30.262	4.780	23.643
100.	100.	7.74	30.342	4.520	23.684
150.	150.	8.10	30.499	4.100	23.758
200.	200.	8.11	30.607	3.780	23.840

STN: 8-12 DATE: 29-2-72 TIME: 2315
LAT: 49°30.4'N LONG: 123°27.4'W DEPTH: 229 BARO: 1021
WIND: 0/0 AIR TEMP: 3.3/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 88
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	22.774	7.240	18.045
2.	2.	5.54	0.0	7.000	0.0
5.	5.	5.58	25.693	6.860	20.291
10.	10.	5.70	27.407	6.510	21.628
20.	20.	6.90	20.561	5.330	16.130
30.	30.	7.70	0.0	4.630	0.0
50.	50.	7.77	30.245	4.710	23.605
75.	75.	7.52	30.254	4.700	23.645
100.	100.	7.71	30.333	4.700	23.681
150.	150.	8.15	30.521	4.070	23.767
200.	200.	8.06	30.606	3.860	23.846

STN: 8-13 DATE: 1-3-72 TIME: 0110
 LAT: 49°31.5'N LONG: 123°27.4'W DEPTH: 229 BARO: 1021.5
 WIND: 0/0 AIR TEMP: 3.3/1.7 SECCHI:

REFERENCE NUMBER- 72- 1- 89
 WIRE ANGLE 10.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	23.711	7.100	18.766
2.	2.	5.55	25.267	6.930	19.959
5.	5.	5.53	25.730	6.870	20.325
10.	10.	5.60	26.321	6.680	20.784
20.	20.	6.72	29.393	5.500	23.073
30.	30.	7.63	30.096	4.770	23.506
49.	50.	7.74	30.243	4.680	23.607
74.	75.	7.62	30.255	4.640	23.633
98.	100.	7.75	30.329	4.560	23.673
148.	150.	8.22	30.507	4.030	23.746
197.	200.	8.05	30.577	3.970	23.825

STN: 8-14 DATE: 1-3-72 TIME: 0310
 LAT: 49°31.5'N LONG: 123°27.2'W DEPTH: 225 BARO: 1020
 WIND: 0/0 AIR TEMP: 3.3/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 90
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.80	23.011	7.190	18.249
2.	2.	5.55	24.402	7.060	19.278
5.	5.	5.56	25.480	6.870	20.125
10.	10.	5.62	26.400	6.650	20.843
20.	20.	6.80	29.436	5.320	23.097
30.	30.	7.67	30.077	4.690	23.486
50.	50.	7.71	30.217	4.750	23.590
75.	75.	7.62	30.255	4.620	23.632
100.	100.	7.75	30.332	4.560	23.675
150.	150.	8.07	30.474	4.190	23.742
200.	200.	8.08	30.595	3.860	23.835

STN: 8-15 DATE: 1-3-72 TIME: 0530
 LAT: 49°31.6'N LONG: 123°26.7'W DEPTH: 225 BARO: 1018.5
 WIND: 0/0 AIR TEMP: 3.3/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 91
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.90	23.094	7.270	18.306
2.	2.	5.46	24.932	6.980	19.704
5.	5.	5.52	25.644	6.770	20.259
10.	10.	5.62	26.503	6.590	20.924
20.	20.	6.63	29.302	5.430	23.012
30.	30.	7.63	30.046	4.800	23.468
50.	50.	7.72	30.223	4.700	23.593
75.	75.	7.69	30.261	4.680	23.627
100.	100.	7.49	30.417	4.720	23.777
150.	150.	8.05	30.504	4.170	23.768
200.	200.	8.05	30.587	3.850	23.833

STN: 8-16 DATE: 1-3-72 TIME: 0720
 LAT: 49°31.7'N LONG: 123°26.7'W DEPTH: 230 BARO: 1017
 WIND: 090/3 AIR TEMP: 3.3/1.7 SECCHI:

REFERENCE NUMBER- 72- 1- 92
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.50	22.670	7.350	18.004
2.	2.	5.46	25.125	6.990	19.856
5.	5.	5.53	25.838	6.830	20.411
10.	10.	5.56	26.241	6.710	20.724
20.	20.	6.62	29.275	5.510	22.992
30.	30.	7.47	30.030	4.850	23.476
50.	50.	7.78	30.219	4.660	23.582
75.	75.	7.60	30.255	4.710	23.635
100.	100.	7.48	30.292	4.820	23.681
150.	150.	7.96	30.476	4.340	23.759
200.	200.	8.11	30.578	3.900	23.818

STN: 8-17 DATE: 1-3-72 TIME: 0915
LAT: 49°31.6'N LONG: 123°26.7'W DEPTH: 227 BARO: 1016
WIND: 0/0 AIR TEMP: 3.9/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 93
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.80	23.316	7.230	18.489
2.	2.	5.39	24.540	7.070	19.402
5.	5.	5.51	26.065	6.820	20.591
10.	10.	5.56	26.094	6.720	20.609
20.	20.	6.54	29.179	5.470	22.926
30.	30.	7.44	29.008	4.840	22.680
50.	50.	7.87	30.225	4.580	23.574
75.	75.	7.73	30.296	4.470	23.649
100.	100.	7.63	30.317	4.610	23.680
150.	150.	8.10	0.0	4.090	0.0
200.	200.	8.12	30.578	3.810	23.816

STN: 8-18 DATE: 1-3-72 TIME: 1115
LAT: 49°31.7'N LONG: 123°26.7'W DEPTH: 225 BARO: 1013
WIND: 0/0 AIR TEMP: 3.9/2.2 SECCHI: 5/yellow-green

REFERENCE NUMBER- 72- 1- 94
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.80	23.100	7.310	18.319
2.	2.	5.47	24.727	7.030	19.541
5.	5.	5.50	25.589	6.910	20.218
10.	10.	5.53	25.994	6.820	20.534
20.	20.	6.67	29.224	5.520	22.946
30.	30.	7.51	30.042	4.820	23.480
50.	50.	7.83	30.297	4.610	23.636
75.	75.	7.74	30.299	4.420	23.651
100.	100.	7.81	30.325	4.540	23.662
150.	150.	8.01	30.458	4.250	23.737
200.	200.	8.03	30.575	3.860	23.826

STN: 8-19 DATE: 1-3-72 TIME: 1310
LAT: 49°31.6'N LONG: 123°27.1'W DEPTH: 227 BARO: 1009.5
WIND: 060/5 AIR TEMP: 3.3/2.2 SECCHI: 5/green

REFERENCE NUMBER- 72- 1- 95
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	23.988	7.150	19.002
2.	2.	5.45	25.003	7.050	19.761
5.	5.	5.49	25.512	6.910	20.158
10.	10.	5.57	26.231	6.710	20.716
20.	20.	6.80	29.500	5.370	23.146
30.	30.	7.70	30.130	4.630	23.524
50.	50.	7.72	30.215	4.730	23.587
75.	75.	7.90	30.276	4.500	23.611
100.	100.	7.47	30.273	4.730	23.666
150.	150.	8.17	30.492	4.030	23.742
200.	200.	8.14	30.596	3.740	23.827

STN: 8-20 DATE: 1-3-72 TIME: 1510
LAT: 49°31.5'N LONG: 123°27.2'W DEPTH: 223 BARO: 1006
WIND: 060/5 AIR TEMP: 2.2/2.2 SECCHI: 5.5/yellow-green

REFERENCE NUMBER- 72- 1- 96
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.70	23.324	7.250	18.504
2.	2.	5.47	24.878	7.010	19.660
5.	5.	5.49	25.517	6.890	20.161
10.	10.	5.56	26.077	6.740	20.595
20.	20.	6.76	29.455	5.500	23.116
30.	30.	7.73	30.147	4.630	23.533
50.	50.	7.71	30.217	4.700	23.590
75.	75.	7.90	30.308	4.390	23.636
100.	100.	7.55	30.299	4.730	23.676
150.	150.	8.16	30.492	4.070	23.743
200.	200.	8.17	30.592	3.710	23.820

STN: 8-21 DATE: 1-3-72 TIME: 1705
LAT: 49°31.5'N LONG: 123°27.1'W DEPTH: 224 BARO: 1004
WIND: 060/5 AIR TEMP: 2.8/1.7 SECCHI:

REFERENCE NUMBER- 72- 1- 97
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.60	23.345	7.240	18.527
2.	2.	5.42	24.914	7.050	19.694
5.	5.	5.50	25.588	6.900	20.217
10.	10.	5.81	26.709	6.500	21.067
20.	20.	7.05	29.667	5.220	23.246
30.	30.	7.75	30.157	4.610	23.538
50.	50.	7.73	30.258	4.610	23.620
75.	75.	7.85	30.286	4.540	23.625
100.	100.	7.49	30.308	4.790	23.692
150.	150.	8.22	30.503	4.000	23.743
200.	200.	8.10	30.592	3.790	23.830

STN: 8-22 DATE: 1-3-72 TIME: 1920
LAT: 49°31.7'N LONG: 123°26.6'W DEPTH: 228 BARO: 1002
WIND: 035/5 AIR TEMP: 2.8/1.7 SECCHI:

REFERENCE NUMBER- 72- 1- 98
WIRE ANGLE 7.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.50	22.100	7.390	17.553
2.	2.	5.08	24.116	7.150	19.096
5.	5.	5.48	25.288	6.650	19.983
10.	10.	5.63	26.333	5.170	20.790
20.	20.	7.06	29.721	4.750	23.288
30.	30.	7.59	30.077	4.560	23.497
50.	50.	7.81	30.274	4.370	23.621
74.	75.	7.89	30.316	4.470	23.643
99.	100.	7.82	30.349	4.420	23.679
149.	150.	8.06	30.488	4.200	23.754
199.	200.	8.05	30.590	3.980	23.835

STN: 8-23 DATE: 1-3-72 TIME: 2125
LAT: 49°31.4'N LONG: 123°27'W DEPTH: 223 BARO: 1003
WIND: 030/3 AIR TEMP: 2.8/2.2 SECCHI:

REFERENCE NUMBER- 72- 1- 99
WIRE ANGLE 6.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	24.174	7.150	19.149
2.	2.	5.27	24.477	7.150	19.363
5.	5.	5.49	25.446	6.910	20.106
10.	10.	5.67	26.655	6.580	21.039
20.	20.	7.11	29.764	5.140	23.314
30.	30.	7.66	30.133	4.660	23.531
50.	50.	7.72	30.235	4.640	23.603
75.	75.	7.72	30.274	4.570	23.634
99.	100.	7.81	30.342	4.540	23.675
149.	150.	8.04	30.472	4.160	23.745
199.	200.	8.05	30.583	3.840	23.829

STN: 8-24 DATE: 1-3-72 TIME: 2310
LAT: 49°31.3'N LONG: 123°26.9'W DEPTH: 227 BARO: 1002
WIND: 0/0 AIR TEMP: 2.2/1.1 SECCHI:

REFERENCE NUMBER- 72- 1-100
WIRE ANGLE 4.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.80	23.498	7.250	18.633
2.	2.	5.26	24.234	7.150	19.173
5.	5.	5.50	25.659	6.880	20.272
10.	10.	5.69	26.760	6.540	21.120
20.	20.	6.98	29.620	5.140	23.218
30.	30.	7.64	30.096	4.720	23.505
50.	50.	7.85	30.251	4.070	23.598
75.	75.	7.90	30.318	4.380	23.644
100.	100.	7.71	30.341	4.530	23.687
150.	150.	8.14	30.496	4.010	23.749
200.	200.	8.13	0.0	3.720	0.0

STN: 8-25 DATE: 2-3-72 TIME: 0105
LAT: 49°31.4'N LONG: 123°27.3'W DEPTH: 224 BARO: 1002
WIND: 0/0 AIR TEMP: 1.7/1.7 SECCHI:

REFERENCE NUMBER- 72- 1-101
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.50	21.960	7.480	17.443
2.	2.	5.34	24.507	7.030	19.380
5.	5.	5.52	25.137	6.920	19.860
10.	10.	5.67	26.476	6.580	20.899
20.	20.	6.85	29.514	5.360	23.151
30.	30.	7.74	29.151	4.630	22.752
50.	50.	7.70	30.228	4.710	23.601
75.	75.	7.53	30.241	4.700	23.633
100.	100.	7.69	30.344	4.510	23.693
150.	150.	8.29	30.497	4.030	23.729
200.	200.	8.12	30.690	3.730	23.903

STN: 8-26 DATE: 2-3-72 TIME: 0310
LAT: 49°31.5'N LONG: 123°27.3'W DEPTH: 223 BARO: 1001
WIND: 0/0 AIR TEMP: 2.2/2.2 SECCHI:

REFERENCE NUMBER- 72- 1-102
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.10	22.077	7.440	17.564
2.	2.	5.04	23.796	7.380	18.847
5.	5.	5.47	24.979	6.930	19.740
10.	10.	5.82	26.966	6.410	21.268
20.	20.	6.94	29.631	5.200	23.232
30.	30.	7.75	30.149	4.610	23.532
50.	50.	7.71	30.228	4.660	23.598
75.	75.	7.82	30.298	4.420	23.639
100.	100.	7.70	30.321	4.580	23.673
150.	150.	8.07	30.480	4.090	23.746
200.	200.	8.19	30.632	3.610	23.849

STN: 9 DATE: 2-3-72 TIME: 0415
LAT: 49°24.5'N LONG: 123°28.6'W DEPTH: 91 BARO: 1001
WIND: 0/0 AIR TEMP: 4.4/4.4 SECCHI:

REFERENCE NUMBER- 72- 1-103
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.00	24.698	7.140	19.562
2.	2.	5.20	24.674	7.110	19.525
5.	5.	5.35	25.025	7.010	19.788
10.	10.	5.66	25.710	6.910	20.296
20.	20.	6.78	29.457	5.530	23.116
30.	30.	7.49	30.063	4.800	23.500
50.	50.	7.74	30.209	4.530	23.580
75.	75.	7.69	30.239	4.470	23.610

STN: 10 DATE: 2-3-72 TIME: 0500
LAT: 49°23.5'N LONG: 123°25.1'W DEPTH: 165 BARO: 1001
WIND: 0/0 AIR TEMP: 5.0/4.4 SECCHI:

REFERENCE NUMBER- 72- 1-104
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	5.20	25.662	7.150	20.304
2.	2.	5.42	25.652	7.110	20.274
5.	5.	5.44	25.656	7.130	20.276
10.	10.	5.69	26.120	6.890	20.616
20.	20.	6.93	29.538	5.620	23.160
30.	30.	7.19	30.049	5.220	23.529
50.	50.	6.77	30.090	5.560	23.613
75.	75.	6.74	30.121	5.490	23.642
100.	100.	6.82	30.191	5.310	23.686
150.	150.	7.38	30.364	4.820	23.749

STN: 11 DATE: 2-3-72 TIME: 0555
LAT: 49°25.5'N LONG: 123°22'W DEPTH: 248 BARO: 1002
WIND: 0/0 AIR TEMP: 5.6/4.4 SECCHI:

REFERENCE NUMBER- 72- 1-105
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	4.90	24.639	7.080	19.524
2.	2.	5.31	24.968	6.980	19.746
5.	5.	5.35	25.276	7.020	19.985
10.	10.	6.02	27.470	6.280	21.643
20.	20.	6.89	29.682	5.530	23.278
30.	30.	7.39	0.0	4.980	0.0
50.	50.	7.36	30.165	5.030	23.597
75.	75.	6.97	30.179	5.330	23.658
100.	100.	7.15	30.245	5.200	23.687
150.	150.	7.57	30.407	4.630	23.758
200.	200.	7.17	30.462	4.750	23.855

STN: 1 DATE: 19-6-72 TIME: 2005
LAT: 49°19'N LONG: 123°22'W DEPTH: BARO: 1016
WIND: 0/0 AIR TEMP: 17.2/15.0 SECCHI:

REFERENCE NUMBER- 72- 2- 1
WIRE ANGLE 5.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.70	6.738	7.640	4.395
2.	2.	13.05	11.858	7.390	8.591
5.	5.	9.34	25.770	5.690	19.894
10.	10.	0.0	26.055	7.190	0.0
20.	20.	8.08	29.081	5.140	22.651
30.	30.	8.03	29.332	5.090	22.854
50.	50.	8.43	29.629	4.930	23.031
75.	75.	8.43	29.771	4.790	23.139
100.	100.	8.45	29.991	5.100	23.308
149.	150.	8.06	30.252	4.440	23.568
199.	200.	7.95	30.489	4.270	23.770
229.	230.	7.88	30.580	4.050	23.851

STN: 2 DATE: 19-6-72 TIME: 2140
LAT: 49°24'N LONG: 123°18.6'W DEPTH: 256 BARO: 1015
WIND: 200/8 AIR TEMP: 16.7/14.4 SECCHI:

REFERENCE NUMBER- 72- 2- 2
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.70	8.260	8.440	5.394
2.	2.	13.79	9.676	8.840	6.798
5.	5.	10.44	23.590	5.860	18.040
10.	10.	9.60	27.844	5.740	21.468
20.	20.	8.28	29.099	5.390	22.638
30.	30.	7.91	29.318	5.020	22.860
50.	50.	8.22	29.530	5.420	22.982
75.	75.	8.34	29.813	5.140	23.187
100.	100.	8.19	29.922	5.540	23.291
150.	150.	7.25	30.097	5.090	23.558
200.	200.	7.63	30.430	4.350	23.768
230.	230.	7.78	30.567	4.050	23.855

STN: 3-1 DATE: 19-6-72 TIME: 2310
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1016
 WIND: 0/0 AIR TEMP: 15.6/14.4 SECCHI:

REFERENCE NUMBER- 72- 2- 3
 WIRE ANGLE 0.

	DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
	-0.	0.	15.30	7.570	8.090	4.934
*	2.	2.	13.49	9.082	2.150	6.387
	5.	5.	10.52	22.739	0.0	17.369
	10.	10.	7.52	27.720	1.610	21.661
	20.	20.	7.87	28.834	1.600	22.487
	30.	30.	7.86	29.237	1.450	22.803
	50.	50.	0.0	29.501	1.600	0.0
	75.	75.	8.01	29.749	2.550	23.183
	100.	100.	7.44	29.786	1.550	23.289
	150.	150.	7.37	30.154	1.350	23.587
	200.	200.	7.71	30.473	1.100	23.790
	230.	230.	7.78	30.564	1.100	23.852

* All O2 values, except at 0 m, are obviously erroneous, Reason unknown.

STN: 3-2 DATE: 20-6-72 TIME: 0110
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1015
 WIND: 0/0 AIR TEMP: 15.0/13.9 SECCHI:

REFERENCE NUMBER- 72- 2- 4
 WIRE ANGLE 0.

	DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
	-0.	0.	14.90	7.743	8.040	5.134
	2.	2.	13.48	8.847	8.170	6.209
	5.	5.	10.79	22.226	6.200	16.931
	10.	10.	8.10	28.032	5.690	21.829
	20.	20.	8.06	28.900	5.290	22.512
	30.	30.	7.93	29.176	5.140	22.746
	50.	50.	0.0	29.488	5.090	0.0
	75.	75.	7.53	29.639	5.220	23.162
	100.	100.	7.39	29.774	5.140	23.286
	150.	150.	7.33	30.157	4.400	23.594
	200.	200.	7.70	30.475	4.050	23.793
	240.	240.	7.80	30.579	3.550	23.862

STN: 3-3 DATE: 20-6-72 TIME: 0310
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
 WIND: 0/0 AIR TEMP: 14.4/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 5
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.80	7.718	8.090	5.131
2.	2.	12.55	9.704	8.040	7.005
5.	5.	10.82	22.367	6.190	17.035
10.	10.	8.02	28.095	5.770	21.889
20.	20.	8.07	28.986	5.240	22.579
30.	30.	7.97	29.183	5.060	22.746
50.	50.	0.0	29.561	4.980	0.0
75.	75.	8.20	29.749	4.990	23.156
100.	100.	7.19	29.750	5.240	23.294
150.	150.	7.30	30.144	4.990	23.588
200.	200.	7.67	30.449	4.200	23.777
240.	240.	7.77	30.559	3.730	23.849

STN: 3-4 DATE: 20-6-72 TIME: 0510
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
 WIND: 0/0 AIR TEMP: 13.9/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 6
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.20	7.803	8.090	5.294
2.	2.	12.44	8.984	8.040	6.465
5.	5.	9.68	25.791	5.840	19.860
10.	10.	8.02	28.156	5.490	21.937
20.	20.	8.06	28.931	5.240	22.536
30.	30.	7.99	29.195	5.090	22.753
50.	50.	0.0	29.558	4.890	0.0
75.	75.	8.25	29.714	4.860	23.123
100.	100.	7.79	29.748	5.090	23.212
150.	150.	7.21	30.078	4.930	23.548
200.	200.	7.67	30.452	4.150	23.780
240.	240.	7.80	30.568	3.700	23.854

STN: 3-5 DATE: 20-6-72 TIME: 0710
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
WIND: 0/0 AIR TEMP: 14.4/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 7
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.00	11.670	7.490	8.454
2.	2.	12.70	10.821	7.490	7.845
5.	5.	9.30	26.325	5.610	20.331
10.	10.	7.87	28.373	5.530	22.127
20.	20.	8.06	28.986	5.240	22.580
30.	30.	8.02	29.199	5.110	22.752
50.	50.	8.14	29.566	4.940	23.022
75.	75.	8.07	29.771	4.920	23.192
100.	100.	7.39	29.678	5.160	23.212
150.	150.	7.29	30.043	5.040	23.510
200.	200.	7.68	30.479	4.130	23.800
240.	240.	7.80	0.0	3.620	0.0

STN: 3-6 DATE: 20-6-72 TIME: 0910
LAT: 49°28'N LONG: 123°17.2'W DEPTH: 256 BARO: 1014
WIND: 0/0 AIR TEMP: 14.4/13.3 SECCHI: 2.5/1t. green

REFERENCE NUMBER- 72- 2- 8
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.90	6.240	7.700	3.981
2.	2.	12.74	9.582	7.680	6.884
5.	5.	10.22	24.137	5.890	18.496
10.	10.	0.0	28.029	5.590	0.0
20.	20.	8.08	28.908	5.290	22.516
30.	30.	7.83	29.261	5.090	22.826
50.	50.	8.19	29.590	4.890	23.034
75.	75.	8.27	29.780	4.840	23.171
100.	100.	7.07	29.725	5.290	23.290
150.	150.	7.27	30.132	4.990	23.583
200.	200.	7.68	30.472	4.150	23.795
240.	240.	7.80	30.557	3.730	23.844

STN: 3-7 DATE: 20-6-72 TIME: 1110
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
WIND: 210/5 AIR TEMP: 15.0/13.3 SECCHI: 2.5/dk. green

REFERENCE NUMBER- 72- 2- 9
WIRE ANGLE 3.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.20	6.918	7.730	4.451
2.	2.	13.52	9.264	7.740	6.524
5.	5.	11.13	20.978	6.340	15.915
10.	10.	8.42	27.622	5.710	21.465
20.	20.	7.95	28.947	5.420	22.564
30.	30.	7.82	29.332	5.090	22.884
50.	50.	7.99	29.600	4.980	23.070
75.	75.	8.10	29.799	4.890	23.210
100.	100.	7.08	29.795	5.280	23.344
150.	150.	7.29	30.172	4.910	23.612
200.	200.	7.70	30.497	4.070	23.810
240.	240.	7.81	30.592	3.670	23.871

STN: 3-8 DATE: 20-6-72 TIME: 1310
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014.5
WIND: 180/5 AIR TEMP: 14.4/12.8 SECCHI: 3/green-brown

REFERENCE NUMBER- 72- 2- 10
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.30	7.560	8.120	4.927
2.	2.	13.04	8.431	8.120	5.954
5.	5.	11.69	18.849	6.490	14.186
10.	10.	8.11	27.954	5.930	21.766
20.	20.	8.03	28.991	5.230	22.588
30.	30.	7.83	29.303	5.130	22.860
50.	50.	8.03	29.584	4.920	23.051
75.	75.	8.27	29.830	4.840	23.211
100.	100.	7.05	29.786	5.390	23.340
150.	150.	7.29	30.179	4.880	23.616
200.	200.	7.71	30.504	4.030	23.815
240.	240.	7.82	30.592	3.650	23.869

STN: 3-9 DATE: 20-6-72 TIME: 1510
LAT: 48°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014.5
WIND: 0/0 AIR TEMP: 15.0/13.3 SECCHI: 2/green-brown

REFERENCE NUMBER- 72- 2- 11
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.40	7.534	8.210	4.890
2.	2.	13.64	9.205	8.010	6.459
5.	5.	11.41	19.138	6.440	14.451
10.	10.	8.51	27.533	5.620	21.384
20.	20.	8.06	29.006	5.190	22.596
30.	30.	7.89	29.246	5.090	22.806
50.	50.	8.17	29.575	4.890	23.025
75.	75.	8.26	29.826	4.800	23.208
100.	100.	7.08	29.785	5.340	23.335
150.	150.	7.27	30.167	4.900	23.610
200.	200.	7.73	30.511	3.950	23.818
240.	240.	7.81	30.589	3.650	23.869

STN: 3-10 DATE: 20-6-72 TIME: 1710
LAT: 48°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014.5
WIND: 0/0 AIR TEMP: 15.0/13.3 SECCHI: 1.5/green-brown

REFERENCE NUMBER- 72- 2- 12
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	16.00	7.871	8.220	5.043
2.	2.	14.31	0.0	8.340	0.0
5.	5.	10.20	0.0	5.990	0.0
10.	10.	8.18	0.0	5.640	0.0
20.	20.	7.92	0.0	5.340	0.0
30.	30.	7.89	0.0	5.130	0.0
50.	50.	7.87	0.0	5.040	0.0
75.	75.	8.28	29.791	4.750	23.178
100.	100.	7.33	29.755	5.250	23.280
150.	150.	7.24	30.107	4.940	23.567
200.	200.	7.66	30.480	4.100	23.803
240.	240.	7.80	30.588	3.730	23.868

STN: 3-11 DATE: 20-6-72 TIME: 1910
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
 WIND: 215/5 AIR TEMP: 15.6/13/3 SECCHI:

REFERENCE NUMBER- 72- 2- 13
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.70	7.898	8.340	5.116
2.	2.	13.15	11.187	7.690	8.059
5.	5.	10.07	24.565	5.920	18.851
10.	10.	8.14	27.911	5.560	21.729
20.	20.	7.98	28.972	5.240	22.580
30.	30.	7.92	29.255	5.140	22.809
50.	50.	8.13	29.571	4.960	23.027
75.	75.	8.19	29.781	4.900	23.184
100.	100.	7.57	29.797	5.140	23.281
150.	150.	7.21	30.119	5.000	23.580
200.	200.	7.69	30.492	4.050	23.808
240.	240.	7.79	30.579	3.710	23.862

STN: 3-12 DATE: 20-6-72 TIME: 2110
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
 WIND: 145/5 AIR TEMP: 15.0/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 14
 WIRE ANGLE 0.

	DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
*	-0.	0.	15.50	7.999	4.880	5.229
	2.	2.	14.58	8.555	8.190	5.811
	5.	5.	10.04	24.899	5.890	19.114
	10.	10.	8.15	27.910	5.640	21.727
	20.	20.	8.13	28.948	5.190	22.541
	30.	30.	8.02	29.218	5.050	22.767
	50.	50.	8.07	29.561	4.950	23.028
	75.	75.	7.69	29.691	5.090	23.181
	100.	100.	7.20	29.752	5.260	23.294
	150.	150.	7.24	30.140	4.930	23.593
	200.	200.	7.67	30.466	4.170	23.791
	240.	240.	7.79	30.584	3.720	23.867

* Doubtful O2 value at 0 m.

STN: 3-13 DATE: 20-6-72 TIME: 2310
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014.5
 WIND: 165/8 AIR TEMP: 14.4/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 15
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.20	8.017	8.140	5.294
2.	2.	14.22	9.579	8.090	6.654
5.	5.	10.60	23.425	6.040	17.889
10.	10.	8.10	27.982	5.590	21.790
20.	20.	8.05	28.992	5.220	22.586
30.	30.	8.00	29.240	5.090	22.786
50.	50.	8.07	29.567	4.970	23.032
75.	75.	7.96	29.753	4.930	23.193
100.	100.	7.08	29.765	5.240	23.320
150.	150.	7.22	30.136	4.900	23.592
200.	200.	7.70	30.486	4.060	23.803
240.	240.	7.80	30.577	3.760	23.860

STN: 3-14 DATE: 21-6-72 TIME: 0110
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
 WIND: 0/0 AIR TEMP: 13.9/12.9 SECCHI:

REFERENCE NUMBER- 72- 2- 16
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.80	7.730	8.060	5.141
2.	2.	13.24	10.996	7.480	7.898
5.	5.	10.70	22.990	6.090	17.537
10.	10.	8.27	27.933	5.660	21.728
20.	20.	8.01	29.002	5.220	22.599
30.	30.	7.95	29.275	5.080	22.821
50.	50.	8.10	29.614	4.920	23.065
75.	75.	8.12	29.793	4.890	23.202
100.	100.	7.09	29.761	5.250	23.315
150.	150.	7.27	30.169	4.850	23.611
200.	200.	7.73	30.508	3.960	23.816
240.	240.	7.80	30.580	3.730	23.862

STN: 3-15 DATE: 21-6-72 TIME: 0310
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014
 WIND: 0/0 AIR TEMP: 13.9/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 17
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.30	7.009	7.690	4.667
2.	2.	14.51	8.840	8.030	6.040
5.	5.	10.55	23.297	5.940	17.797
10.	10.	8.09	28.041	5.540	21.837
20.	20.	8.08	29.053	5.140	22.629
30.	30.	8.22	29.339	4.980	22.834
50.	50.	8.09	29.603	4.890	23.058
75.	75.	8.02	29.766	4.930	23.195
100.	100.	7.14	29.775	4.960	23.319
150.	150.	7.29	30.183	4.840	23.620
200.	200.	7.71	30.499	4.010	23.811
240.	240.	7.80	30.581	3.650	23.863

STN: 3-16 DATE: 21-6-73 TIME: 0510
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014.5
 WIND: 245/5 AIR TEMP: 14.4/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 18
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.50	7.127	7.900	4.726
2.	2.	13.57	9.546	7.900	6.731
5.	5.	10.68	22.625	6.050	17.257
10.	10.	7.86	28.245	5.490	22.028
20.	20.	8.02	29.074	5.170	22.654
30.	30.	7.92	29.306	5.040	22.849
50.	50.	7.99	29.584	4.940	23.057
75.	75.	7.83	29.747	4.990	23.206
100.	100.	7.12	29.765	5.240	23.314
150.	150.	7.26	30.155	4.890	23.602
200.	200.	7.70	30.485	4.040	23.801
240.	240.	7.80	30.582	3.670	23.864

STN: 3-17 DATE: 21-6-72 TIME: 0720
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1015
 WIND: 0/0 AIR TEMP: 15.0/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 19
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.40	7.113	7.790	4.732
2.	2.	13.43	9.594	7.840	6.791
5.	5.	10.08	24.791	5.850	19.025
10.	10.	7.94	28.297	5.550	22.057
20.	20.	7.98	29.062	5.180	22.651
30.	30.	7.95	29.292	5.090	22.834
50.	50.	8.07	29.062	4.920	22.638
75.	75.	8.04	29.800	4.890	23.219
100.	100.	7.13	29.744	5.240	23.296
150.	150.	7.20	30.125	4.940	23.586
200.	200.	7.67	30.481	4.100	23.803
240.	240.	7.80	0.0	3.680	0.0

STN: 3-18 DATE: 21-6-72 TIME: 0910
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1015.5
 WIND: 0/0 AIR TEMP: 16.7/13.9 SECCHI: 2

REFERENCE NUMBER- 72- 2- 20
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.80	7.116	7.930	4.669
2.	2.	12.83	11.273	7.460	8.174
5.	5.	10.78	22.624	6.050	17.241
10.	10.	8.38	27.696	5.640	21.528
20.	20.	8.00	29.015	5.190	22.610
30.	30.	7.91	29.274	5.060	22.825
50.	50.	8.07	29.598	4.920	23.057
75.	75.	7.98	29.775	4.980	23.208
100.	100.	7.20	29.777	5.240	23.314
150.	150.	7.19	30.124	4.970	23.587
200.	200.	7.66	30.472	4.160	23.796
240.	240.	7.79	30.587	3.640	23.869

STN: 3-19 DATE: 21-6-72 TIME: 1110
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1016
 WIND: 0/0 AIR TEMP: 15.0/12.8 SECCHI: 2/brown-green

REFERENCE NUMBER- 72- 2- 21
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.90	7.186	7.890	4.707
2.	2.	14.52	8.652	8.130	5.893
5.	5.	10.93	22.076	6.100	16.795
10.	10.	8.33	27.710	5.610	21.546
20.	20.	7.87	28.983	5.140	22.604
30.	30.	7.93	29.293	5.110	22.838
50.	50.	8.13	29.627	4.920	23.071
75.	75.	8.09	29.809	4.940	23.219
100.	100.	7.16	29.802	5.240	23.338
150.	150.	7.22	30.153	4.840	23.605
200.	200.	7.69	30.489	4.060	23.807
240.	240.	7.74	30.590	0.0	23.878

STN: 3-20 DATE: 21-6-72 TIME: 1310
 LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1015.5
 WIND: 0/0 AIR TEMP: 17.2/13.9 SECCHI: 1/brown-green

REFERENCE NUMBER- 72- 2- 22
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	16.10	5.765	7.980	3.414
2.	2.	15.20	7.247	8.220	4.703
5.	5.	11.88	17.158	6.660	12.852
10.	10.	8.09	28.007	5.300	21.811
20.	20.	7.84	29.023	5.240	22.639
30.	30.	7.93	29.295	5.090	22.839
50.	50.	8.01	29.612	4.940	23.076
* 100.	100.	7.11	29.800	5.290	23.343
75.	75.	8.04	29.815	4.900	23.230
150.	150.	7.27	30.187	4.880	23.626
200.	200.	7.71	30.499	4.080	23.811
240.	240.	7.80	30.589	3.740	23.870

* The lines are transposed in their entirety for 75 and 100 m.

STN: 3-21 DATE: 21-6-72 TIME: 1510
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1015
WIND: 180/8 AIR TEMP: 16.1/12.8 SECCHI: 1/brown-green

REFERENCE NUMBER- 72- 2- 23
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	16.10	4.906	8.050	2.756
2.	2.	14.44	7.214	7.940	4.803
5.	5.	11.51	20.102	6.200	15.180
10.	10.	8.23	27.888	5.640	21.699
20.	20.	7.85	28.996	5.230	22.616
30.	30.	7.87	29.283	5.090	22.838
50.	50.	7.90	29.598	4.990	23.080
75.	75.	8.06	29.817	4.940	23.230
100.	100.	7.14	29.798	5.230	23.338
150.	150.	7.27	30.192	4.840	23.630
200.	200.	7.71	30.494	4.050	23.807
240.	240.	7.80	30.589	3.680	23.870

STN: 3-22 DATE: 21-6-72 TIME: 1710
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1014.5
WIND: 170/6 AIR TEMP: 16.7/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 24
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	16.30	5.536	7.850	3.203
2.	2.	15.12	7.012	8.240	4.538
5.	5.	10.73	22.247	6.160	16.957
10.	10.	7.92	28.240	5.540	22.015
20.	20.	7.86	28.972	5.260	22.597
30.	30.	7.92	29.238	5.110	22.797
50.	50.	8.00	29.591	4.900	23.061
75.	75.	8.07	29.791	4.940	23.208
100.	100.	7.19	29.784	5.330	23.320
150.	150.	7.23	30.151	4.920	23.602
200.	200.	7.72	30.499	4.100	23.811
240.	240.	7.80	30.590	3.720	23.870

STN: 3-23 DATE: 21-6-72 TIME: 1910
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1013.5
WIND: 0/0 AIR TEMP: 16.1/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 25
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	16.30	5.834	8.090	3.431
2.	2.	14.27	8.662	7.840	5.942
5.	5.	10.33	21.904	6.130	16.750
10.	10.	8.25	27.817	5.590	21.640
20.	20.	7.86	28.959	5.260	22.586
30.	30.	7.94	29.279	5.050	22.825
50.	50.	8.12	29.559	4.930	23.019
75.	75.	7.78	29.714	5.070	23.187
100.	100.	7.00	29.721	5.320	23.295
150.	150.	7.20	30.137	4.950	23.596
200.	200.	7.67	30.483	4.130	23.804
240.	240.	7.79	30.584	3.720	23.867

STN: 3-24 DATE: 21-6-72 TIME: 2110
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1013
WIND: 0/0 AIR TEMP: 15.0/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 26
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	16.20	6.028	8.150	3.597
2.	2.	14.19	8.449	7.790	5.791
5.	5.	10.56	23.867	5.920	18.237
10.	10.	8.18	27.923	5.590	21.733
20.	20.	7.84	28.853	5.300	22.506
30.	30.	7.95	29.244	5.050	22.796
50.	50.	8.05	29.559	4.940	23.029
75.	75.	8.07	29.776	4.960	23.196
100.	100.	6.96	29.721	5.320	23.301
150.	150.	7.22	30.151	4.530	23.605
200.	200.	7.69	30.497	4.100	23.812
240.	240.	7.80	30.592	3.700	23.871

STN: 3-25 DATE: 21-6-72 TIME: 2310
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1013
WIND: 0/0 AIR TEMP: 16.1/13.9 SECCHI:

REFERENCE NUMBER- 72- 2- 27
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.40	6.110	7.930	3.798
2.	2.	15.00	8.677	7.850	5.833
5.	5.	10.27	24.543	5.910	18.805
10.	10.	8.00	28.130	5.520	21.919
20.	20.	7.86	28.978	5.240	22.601
30.	30.	7.75	29.279	5.090	22.852
50.	50.	7.98	29.591	4.930	23.064
75.	75.	7.98	29.782	4.940	23.213
100.	100.	6.98	29.725	5.340	23.301
150.	150.	7.21	30.151	4.900	23.605
200.	200.	7.67	30.477	4.130	23.799
240.	240.	7.79	30.588	3.680	23.870

STN: 3-26 DATE: 22-6-72 TIME: 0110
LAT: 49°28'N LONG: 123°17'W DEPTH: 256 BARO: 1012
WIND: 0/0 AIR TEMP: 13.9/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 28
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.50	6.061	8.010	3.744
2.	2.	15.47	6.637	8.020	4.191
5.	5.	11.70	19.192	6.920	14.448
10.	10.	8.56	27.516	5.660	21.364
20.	20.	7.70	28.865	5.310	22.534
30.	30.	7.82	29.251	5.050	22.819
50.	50.	8.00	29.601	4.920	23.068
75.	75.	7.68	29.762	5.050	23.238
100.	100.	7.08	29.752	5.310	23.310
150.	150.	7.31	30.170	4.900	23.608
200.	200.	7.70	30.496	4.050	23.811
240.	240.	7.81	30.597	3.700	23.875

STN: 4-1 DATE: 22-6-72 TIME: 0310
LAT: 49°32.8'N LONG: 123°16.8'W DEPTH: 164 BARO: 1011
WIND: 0/0 AIR TEMP: 13.3/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 29
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.60	3.635	7.630	2.310
2.	2.	12.85	7.453	7.760	5.226
5.	5.	10.33	22.468	6.130	17.187
10.	10.	8.25	27.841	5.590	21.659
20.	20.	7.69	29.012	5.290	22.650
30.	30.	7.72	29.228	5.160	22.816
50.	50.	7.42	29.470	5.140	23.044
75.	75.	7.94	29.774	4.950	23.212
100.	100.	7.45	29.784	5.120	23.287
150.	150.	7.26	30.120	4.960	23.575

STN: 4-2 DATE: 22-6-72 TIME: 0510
LAT: 49°32.9'N LONG: 123°16.8'W DEPTH: 164 BARO: 1010
WIND: 0/0 AIR TEMP: 12.2/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 30
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.20	3.912	7.590	2.575
2.	2.	12.54	7.540	7.740	5.336
5.	5.	10.71	21.777	6.170	16.596
10.	10.	7.63	27.430	5.580	21.421
20.	20.	7.69	28.968	5.260	22.616
30.	30.	7.65	29.162	5.180	22.773
50.	50.	7.27	29.433	5.180	23.035
75.	75.	7.90	29.759	4.980	23.206
100.	100.	7.60	29.784	5.050	23.266
150.	150.	7.31	30.155	4.900	23.596

STN: 4-3 DATE: 22-6-72 TIME: 0710
LAT: 49°32.9'N LONG: 123°16.8'W DEPTH: 150 BARO: 1009.5
WIND: 0/0 AIR TEMP: 12.2/11.1 SECCHI:

REFERENCE NUMBER- 72- 2- 31
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.60	3.222	7.690	2.113
2.	2.	12.87	4.128	7.740	2.655
5.	5.	12.15	14.458	0.0	10.730
10.	10.	8.78	27.063	5.660	20.980
20.	20.	7.65	28.862	5.340	22.538
30.	30.	7.71	29.176	5.140	22.775
50.	50.	7.38	29.406	5.250	23.000
75.	75.	7.94	29.757	4.990	23.200
100.	100.	7.48	29.812	5.090	23.304
150.	150.	7.31	30.156	4.890	23.596

STN: 4-4 DATE: 22-6-72 TIME: 0910
LAT: 49°32.9'N LONG: 123°16.9'W DEPTH: 150 BARO: 1009
WIND: 0/0 AIR TEMP: 13.3/12.2 SECCHI: 1.5/green

REFERENCE NUMBER- 72- 2- 32
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.60	2.467	7.890	1.635
2.	2.	12.62	6.824	7.710	4.773
5.	5.	11.19	19.822	6.300	15.012
10.	10.	8.15	27.831	5.440	21.665
20.	20.	7.72	28.982	5.750	22.623
30.	30.	7.63	29.263	5.170	22.855
50.	50.	7.40	29.385	5.240	22.981
75.	75.	7.92	29.683	4.990	23.144
100.	100.	7.36	29.832	5.040	23.335
150.	150.	7.33	30.098	4.840	23.548

STN: 4-5 DATE: 22-6-72 TIME: 1110
LAT: 49°32.8'N LONG: 123°17'W DEPTH: 150 BARO: 1008.5
WIND: 0/0 AIR TEMP: 13.3/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 33
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.40	2.694	7.790	1.725
2.	2.	13.09	5.140	7.720	3.407
5.	5.	11.26	18.234	6.450	13.776
10.	10.	8.35	28.011	5.490	21.779
20.	20.	7.77	29.044	5.200	22.664
30.	30.	7.67	29.255	5.140	22.843
50.	50.	7.47	29.476	5.190	23.043
75.	75.	7.69	29.715	5.090	23.201
100.	100.	7.54	29.824	3.950	23.306
150.	150.	7.37	30.196	4.790	23.620

STN: 4-6 DATE: 22-6-72 TIME: 1310
LAT: 49°32.8'N LONG: 123°16.8'W DEPTH: 164 BARO: 1009
WIND: 0/0 AIR TEMP: 13.3/12.2 SECCHI: 1/green

REFERENCE NUMBER- 72- 2- 34
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.70	2.291	8.010	1.487
2.	2.	11.83	6.127	7.740	4.338
5.	5.	12.08	13.088	6.940	9.684
10.	10.	8.14	27.898	5.540	21.719
20.	20.	7.76	28.978	5.240	22.614
30.	30.	7.61	29.167	5.190	22.782
50.	50.	7.31	29.482	5.160	23.068
75.	75.	7.78	29.749	5.140	23.214
100.	100.	7.48	29.828	5.060	23.317
150.	150.	7.25	30.148	4.940	23.597

STN: 4-7 DATE: 22-6-72 TIME: 1510
LAT: 49°32.8'N LONG: 123°16.8'W DEPTH: 164 BARO: 1009
WIND: 0/0 AIR TEMP: 13.3/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 35
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.80	2.742	7.790	1.717
2.	2.	12.89	8.316	7.640	5.886
5.	5.	12.85	10.431	7.360	7.523
10.	10.	8.65	27.481	5.670	21.323
20.	20.	7.70	28.787	5.350	22.473
30.	30.	7.73	29.080	5.120	22.698
50.	50.	7.72	29.460	5.100	22.997
75.	75.	7.89	29.698	5.040	23.159
100.	100.	7.47	29.798	5.090	23.294
150.	150.	7.28	30.139	4.910	23.587

STN: 4-8 DATE: 22-6-72 TIME: 1710
LAT: 49°32.9'N LONG: 123°16.8'W DEPTH: 164 BARO: 1009
WIND: 0/0 AIR TEMP: 15.0/13.9 SECCHI:

REFERENCE NUMBER- 72- 2- 36
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.00	4.039	7.790	2.699
2.	2.	12.04	5.010	7.840	3.446
5.	5.	12.16	13.802	6.990	10.222
10.	10.	9.10	26.671	5.740	20.629
20.	20.	7.67	28.718	5.360	22.422
30.	30.	7.71	29.078	5.220	22.699
50.	50.	7.63	29.438	5.150	22.992
75.	75.	7.85	29.678	4.940	23.149
100.	100.	7.80	29.825	4.940	23.272
150.	150.	7.22	30.081	5.040	23.549

STN: 4-9 DATE: 22-6-72 TIME: 1910
LAT: 49°32.9'N LONG: 123°16.8'W DEPTH: 164 BARO: 1008
WIND: 0/0 AIR TEMP: 15.0/13.6 SECCHI:

REFERENCE NUMBER- 72- 2- 37
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.20	3.356	7.890	2.144
2.	2.	14.07	6.218	7.940	4.095
5.	5.	11.73	16.838	6.630	12.627
10.	10.	8.82	27.209	5.640	21.087
20.	20.	7.69	28.845	5.370	22.519
30.	30.	7.72	29.177	5.190	22.775
50.	50.	7.58	29.405	5.150	22.972
75.	75.	7.60	29.680	5.110	23.185
100.	100.	7.64	29.834	4.990	23.300
150.	150.	7.22	0.0	5.030	0.0

STN: 4-10 DATE: 22-6-72 TIME: 2110
LAT: 49°33'N LONG: 123°16.7'W DEPTH: 164 BARO: 1008
WIND: 0/0 AIR TEMP: 13.9/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 38
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.10	3.249	7.880	2.074
2.	2.	14.48	6.861	7.940	4.525
5.	5.	11.60	18.094	6.490	13.617
10.	10.	8.72	28.122	5.640	21.813
20.	20.	7.69	28.957	5.260	22.607
30.	30.	7.70	29.175	5.180	22.776
50.	50.	7.65	29.424	5.100	22.978
75.	75.	7.40	29.655	5.140	23.191
100.	100.	7.63	29.836	5.000	23.303
150.	150.	7.28	30.126	4.940	23.577

STN: 4-11 DATE: 22-6-72 TIME: 2310
 LAT: 49°33'N LONG: 123°16.5'W DEPTH: 164 BARO: 1008.5
 WIND: 0/0 AIR TEMP: SECCHI:

REFERENCE NUMBER- 72- 2- 39
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.60	3.158	7.380	2.063
2.	2.	14.91	6.323	8.030	4.042
5.	5.	12.09	13.972	6.820	10.364
10.	10.	9.19	26.170	5.740	20.225
20.	20.	7.69	28.704	5.350	22.409
30.	30.	7.59	29.086	5.250	22.722
50.	50.	7.72	29.420	5.080	22.965
75.	75.	7.89	29.672	5.060	23.139
100.	100.	7.52	29.818	5.090	23.304
150.	150.	7.24	30.123	4.970	23.580

STN: 4-12 DATE: 23-6-72 TIME: 0110
 LAT: 49°32.8'N LONG: 123°16.8'W DEPTH: 164 BARO: 1008.5
 WIND: 0/0 AIR TEMP: 12.2/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 40
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.00	3.019	7.830	2.023
2.	2.	12.60	5.081	7.940	3.429
5.	5.	13.59	8.995	7.590	6.305
10.	10.	9.22	26.427	5.740	20.421
20.	20.	7.74	28.771	5.370	22.455
30.	30.	7.65	29.109	5.200	22.732
50.	50.	7.72	29.491	5.090	23.021
75.	75.	7.78	29.727	5.050	23.198
100.	100.	7.60	29.828	5.060	23.301
150.	150.	7.26	30.158	4.940	23.604

STN: 4-13 DATE: 23-6-72 TIME: 0310
LAT: 49°32.8'N LONG: 123°16.9'W DEPTH: 164 BARO: 1008.5
WIND: 0/0 AIR TEMP: 11.1/10.6 SECCHI:

REFERENCE NUMBER- 72- 2- 41
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.80	1.869	7.960	1.245
2.	2.	11.74	4.065	7.900	2.750
5.	5.	12.49	14.056	6.870	10.369
10.	10.	9.95	24.954	5.600	19.170
20.	20.	7.77	28.654	5.400	22.360
30.	30.	7.66	29.091	5.210	22.716
50.	50.	7.70	29.463	5.080	23.001
75.	75.	7.79	29.688	5.050	23.166
100.	100.	7.53	29.797	5.040	23.285
150.	150.	7.27	30.165	4.900	23.609

STN: 4-14 DATE: 23-6-72 TIME: 0510
LAT: 49°32.9'N LONG: 123°16.9'W DEPTH: 164 BARO: 1008
WIND: 0/0 AIR TEMP: 11.1/10.6 SECCHI:

REFERENCE NUMBER- 72- 2- 42
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.10	1.501	8.100	1.016
2.	2.	11.47	3.869	7.840	2.631
5.	5.	12.43	14.716	6.880	10.887
10.	10.	10.06	24.483	5.910	18.789
20.	20.	7.72	28.624	5.420	22.343
30.	30.	7.64	29.074	5.240	22.705
50.	50.	7.56	29.434	5.170	22.997
75.	75.	7.64	29.666	5.120	23.169
100.	100.	7.46	29.799	5.060	23.296
150.	150.	7.30	30.159	4.890	23.600

STN: 4-15 DATE: 23-6-72 TIME: 0710
LAT: 49°32.8'N LONG: 123°16.8'W DEPTH: 164 BARO: 1009
WIND: 0/0 AIR TEMP: 11.1/10.6 SECCHI:

REFERENCE NUMBER- 72- 2- 43
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.10	3.234	7.830	2.179
2.	2.	11.38	3.555	7.820	2.397
5.	5.	12.30	14.997	6.780	11.123
10.	10.	9.26	26.372	5.720	20.374
20.	20.	7.70	28.704	5.400	22.408
30.	30.	7.70	29.004	5.270	22.643
50.	50.	7.63	29.382	5.140	22.948
75.	75.	7.66	29.673	5.140	23.172
100.	100.	7.64	29.879	5.010	23.335
150.	150.	7.35	30.189	4.810	23.617

STN: 4-16 DATE: 23-6-72 TIME: 0910
LAT: 49°33'N LONG: 123°16.5'W DEPTH: 164 BARO: 1010
WIND: 0/0 AIR TEMP: 12.2/11.7 SECCHI: 1/green-blue

REFERENCE NUMBER- 72- 2- 44
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.70	2.779	8.200	1.868
2.	2.	14.16	7.101	7.760	4.761
5.	5.	12.58	14.471	6.870	10.674
10.	10.	9.29	26.476	5.740	20.450
20.	20.	7.69	28.767	5.330	22.459
30.	30.	7.57	29.078	5.240	22.718
50.	50.	7.56	29.416	5.220	22.983
75.	75.	7.55	29.636	5.140	23.157
100.	100.	7.34	29.847	5.120	23.350
150.	150.	7.38	30.246	4.730	23.658

STN: 4-17 DATE: 23-6-72 TIME: 1110
LAT: 49°33'N LONG: 123°16.9'W DEPTH: 164 BARO: 1010
WIND: 0/0 AIR TEMP: 14.4/12.8 SECCHI: 1/green-blue

REFERENCE NUMBER- 72- 2- 45
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.00	1.741	7.970	1.027
2.	2.	13.66	7.573	7.700	5.200
5.	5.	12.14	15.957	6.690	11.886
10.	10.	9.45	25.920	5.720	19.994
20.	20.	7.75	28.669	5.390	22.373
30.	30.	7.53	29.081	5.260	22.726
50.	50.	7.50	29.443	5.160	23.013
75.	75.	7.61	29.670	5.090	23.176
100.	100.	7.25	29.882	5.100	23.389
150.	150.	7.33	30.215	4.800	23.639

STN: 4-18 DATE: 23-6-72 TIME: 1310
LAT: 49°28.5'N LONG: 123°16.5'W DEPTH: 164 BARO: 1011
WIND: 0/0 AIR TEMP: 17.8/15.6 SECCHI: 1.5/green-blue

REFERENCE NUMBER- 72- 2- 46
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.70	2.627	7.930	1.749
2.	2.	11.24	4.204	7.850	2.918
5.	5.	12.27	15.435	6.740	11.464
10.	10.	12.67	21.296	6.230	15.913
20.	20.	7.82	28.434	5.510	22.180
30.	30.	7.63	29.079	5.240	22.711
50.	50.	7.59	29.445	5.180	23.003
75.	75.	7.77	29.732	5.050	23.202
100.	100.	7.33	29.869	5.130	23.369
150.	150.	7.41	30.239	4.760	23.648

STN: 4-19 DATE: 23-6-72 TIME: 1510
LAT: 49°28.8'N LONG: 123°16.5'W DEPTH: 164 BARO: 1011.5
WIND: 0/0 AIR TEMP: 16.7/14.4 SECCHI: 1/blue-green

REFERENCE NUMBER- 72- 2- 47
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.90	2.472	7.980	1.608
2.	2.	12.20	5.408	7.750	3.734
5.	5.	12.74	15.693	6.710	11.590
10.	10.	10.08	24.251	5.880	18.605
20.	20.	7.83	28.398	5.460	22.151
30.	30.	7.71	28.984	5.250	22.625
50.	50.	7.55	29.418	5.140	22.987
75.	75.	7.43	29.642	5.160	23.178
100.	100.	7.44	29.873	5.100	23.357
150.	150.	7.40	30.241	4.750	23.651

STN: 4-20 DATE: 23-6-72 TIME: 1710
LAT: 49°32.9'N LONG: 123°16.6'W DEPTH: 164 BARO: 1011
WIND: 190/10 AIR TEMP: SECCHI:

REFERENCE NUMBER- 72- 2- 48
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.20	2.868	7.900	1.883
2.	2.	13.65	7.436	7.900	5.096
5.	5.	12.24	14.655	6.720	10.868
10.	10.	10.35	23.960	5.880	18.340
20.	20.	7.79	28.483	5.390	22.223
40.	40.	7.60	29.167	5.150	22.784
60.	60.	7.66	29.492	4.930	23.029
85.	85.	7.47	29.677	5.070	23.199
110.	110.	7.23	29.891	5.090	23.399
150.	150.	7.47	30.278	4.690	23.671

STN: 4-21 DATE: 23-6-72 TIME: 1910
LAT: 49°32.8'N LONG: 123°16.6'W DEPTH: 164 BARO: 1011.5
WIND: 185/5 AIR TEMP: 15.6/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 49
WIRE ANGLE 0.

DEPTH	WIRE	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.50	3.941	7.770	2.683
2.	2.	13.41	7.646	7.570	5.294
5.	5.	12.95	15.622	6.650	11.501
10.	10.	10.12	24.622	5.670	18.888
20.	20.	7.76	28.517	5.350	22.253
30.	30.	7.62	29.059	5.180	22.696
50.	50.	7.59	29.460	5.100	23.014
75.	75.	7.54	29.603	5.130	23.132
100.	100.	7.43	29.832	5.050	23.326
150.	150.	7.45	30.287	4.620	23.680

STN: 4-22 DATE: 23-6-72 TIME: 2110
LAT: 49°33'N LONG: 123°16.5'W DEPTH: 164 BARO: 1011.5
WIND: 0/0 AIR TEMP: 15.6/13.9 SECCHI:

REFERENCE NUMBER- 72- 2- 50
WIRE ANGLE 0.

DEPTH	WIRE	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.40	3.611	7.690	2.438
2.	2.	13.54	7.070	7.550	4.831
5.	5.	12.65	15.478	6.600	11.440
10.	10.	9.46	25.684	5.680	19.809
20.	20.	7.72	28.449	5.350	22.206
30.	30.	7.63	29.014	5.210	22.660
50.	50.	7.65	29.423	5.080	22.977
75.	75.	7.50	29.622	5.100	23.153
100.	100.	7.51	29.865	4.980	23.341
150.	150.	7.45	30.283	4.570	23.677

STN: 4-23 DATE: 23-6-72 TIME: 2310
LAT: 49°33'N LONG: 123°16.5'W DEPTH: 164 BARO: 1012
WIND: 0/0 AIR TEMP: 13.9/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 51
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.40	3.657	7.740	2.474
2.	2.	12.77	5.275	7.700	3.556
5.	5.	12.12	15.304	6.660	11.387
10.	10.	9.58	25.092	5.730	19.332
20.	20.	7.78	28.457	5.350	22.204
30.	30.	7.59	29.112	5.180	22.741
50.	50.	7.41	29.406	5.130	22.996
75.	75.	7.41	29.663	5.080	23.197
100.	100.	7.49	29.864	5.020	23.344
150.	150.	7.44	30.280	4.570	23.676

STN: 4-24 DATE: 24-6-72 TIME: 0110
LAT: 49°32.8'N LONG: 123°16.8'W DEPTH: 164 BARO: 1012
WIND: 0/0 AIR TEMP: 13.9/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 52
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.80	2.580	7.730	1.702
2.	2.	11.25	4.358	7.740	3.036
5.	5.	12.97	13.800	6.650	10.097
10.	10.	9.48	28.927	5.660	22.328
20.	20.	7.77	28.494	5.370	22.234
30.	30.	7.60	29.127	5.170	22.752
50.	50.	7.50	29.439	5.130	23.009
75.	75.	7.68	29.725	5.020	23.209
100.	100.	7.21	29.880	5.100	23.393
150.	150.	7.46	30.288	4.570	23.680

STN: 4-25 DATE: 24-6-72 TIME: 0310
LAT: 49°32.8'N LONG: 123°16.8'W DEPTH: 164 BARO: 1013
WIND: 0/0 AIR TEMP: 12.8/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 53
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.00	2.269	7.840	1.539
2.	2.	11.60	5.919	7.590	4.206
5.	5.	12.43	16.555	6.460	12.303
10.	10.	9.46	25.872	5.630	19.956
20.	20.	7.74	28.571	5.340	22.299
30.	30.	7.63	29.043	5.170	22.683
50.	50.	7.61	29.431	5.100	22.988
75.	75.	7.71	29.751	5.000	23.226
100.	100.	7.11	29.839	5.080	23.373
150.	150.	7.45	30.276	4.530	23.672

STN: 4-26 DATE: 24-6-72 TIME: 0510
LAT: 49°32.9'N LONG: 123°16.8'W DEPTH: 164 BARO: 1013
WIND: 0/0 AIR TEMP: 12.2/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 54
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.00	2.314	7.860	1.574
2.	2.	12.67	6.929	7.510	4.847
5.	5.	11.41	19.470	6.110	14.707
10.	10.	9.14	26.261	5.590	20.304
20.	20.	7.81	28.394	5.350	22.151
30.	30.	7.68	28.907	5.230	22.569
50.	50.	7.46	29.386	5.130	22.974
75.	75.	7.73	29.733	5.070	23.209
100.	100.	7.72	29.852	5.120	23.304
150.	150.	7.45	30.286	4.580	23.679

STN: 5 DATE: 24-6-72 TIME: 0605
 LAT: 49°36'N LONG: 123°14.1'W DEPTH: 284 BARO: 1013
 WIND: 0/0 AIR TEMP: 12.8/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 55
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.70	1.954	7.900	1.320
2.	2.	12.42	6.754	7.480	4.746
5.	5.	11.05	19.730	6.210	14.963
10.	10.	9.58	25.866	5.500	19.933
20.	20.	7.66	28.573	5.340	22.310
30.	30.	7.36	29.017	5.130	22.698
50.	50.	7.02	29.328	5.280	22.985
75.	75.	6.93	29.723	5.130	23.305
100.	100.	7.78	30.269	3.900	23.621
150.	150.	7.99	30.368	3.490	23.669
200.	200.	8.21	30.436	2.670	23.692
250.	250.	8.26	30.460	2.340	23.703

STN: 6-1 DATE: 24-6-72 TIME: 0720
 LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1013.5
 WIND: 0/0 AIR TEMP: 12.2/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 56
 WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.50	0.697	7.880	0.430
2.	2.	10.22	11.505	7.090	8.706
5.	5.	10.34	21.459	6.030	16.404
10.	10.	9.19	26.133	5.670	20.198
20.	20.	7.51	28.444	5.340	22.229
30.	30.	7.16	28.997	5.180	22.707
50.	50.	6.98	29.374	5.280	23.025
75.	75.	7.03	29.727	4.970	23.296
100.	100.	7.84	30.278	0.0	23.620
150.	150.	8.06	30.367	0.0	23.659

STN: 6-2 DATE: 24-6-72 TIME: 0910
LAT: 49°40'N LONG: 123°12.3'W DEPTH: 146 BARO: 1014
WIND: 0/0 AIR TEMP: 13.3/12.2 SECCHI: 1/blue-green

REFERENCE NUMBER- 72- 2- 57
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.60	1.776	7.950	1.271
2.	2.	9.94	13.868	6.880	10.573
5.	5.	10.47	21.533	6.050	16.443
10.	10.	9.30	25.537	5.770	19.717
20.	20.	7.67	28.171	5.450	21.994
30.	30.	7.22	29.073	5.240	22.759
50.	50.	6.93	29.331	5.230	22.998
75.	75.	6.93	29.673	5.120	23.266
100.	100.	7.79	30.258	3.490	23.612
150.	150.	8.06	30.375	2.970	23.665

STN: 6-3 DATE: 24-6-72 TIME: 1110
LAT: 49°40'N LONG: 123°12.3'W DEPTH: 146 BARO: 1014.5
WIND: 0/0 AIR TEMP: 13.9/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 58
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	0.0	0.883	8.050	0.0
2.	2.	9.27	10.431	7.220	7.978
5.	5.	10.56	21.314	6.110	16.260
10.	10.	9.17	25.956	5.750	20.062
20.	20.	7.63	28.173	5.410	22.002
30.	30.	7.23	28.917	5.200	22.635
50.	50.	6.93	29.292	5.230	22.967
75.	75.	6.91	29.625	5.180	23.231
100.	100.	7.78	30.282	3.490	23.632
150.	150.	8.05	30.397	2.870	23.684

STN: 6-4 DATE: 24-6-72 TIME: 1310
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1014.5
WIND: 0/0 AIR TEMP: 15.6/13.3 SECCHI: 1/blue-green

REFERENCE NUMBER- 72- 2- 59
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.20	2.070	7.950	1.454
2.	2.	9.74	10.376	7.220	7.884
5.	5.	10.46	21.729	6.030	16.596
10.	10.	9.05	26.204	5.730	20.272
20.	20.	7.64	28.285	5.350	22.088
30.	30.	7.22	28.946	5.190	22.660
50.	50.	6.92	29.348	5.110	23.012
75.	75.	7.17	29.861	4.640	23.383
100.	100.	7.82	30.288	3.630	23.631
150.	150.	8.02	30.362	0.0	23.661

STN: 6-5 DATE: 24-6-72 TIME: 1510
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1014.5
WIND: 0/0 AIR TEMP: 13.9/12.8 SECCHI: 1/blue-green

REFERENCE NUMBER- 72- 2- 60
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.40	1.605	7.880	1.073
2.	2.	8.84	2.878	7.900	2.117
5.	5.	11.36	14.637	6.670	10.982
10.	10.	9.34	25.603	5.720	19.763
20.	20.	7.55	28.414	5.330	22.200
30.	30.	7.20	28.994	5.220	22.699
50.	50.	6.95	29.371	5.240	23.026
75.	75.	7.39	30.002	4.310	23.465
100.	100.	7.85	30.296	3.470	23.632
150.	150.	8.04	30.374	2.900	23.667

STN: 6-6 DATE: 24-6-72 TIME: 1710
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1014
WIND: 280/8 AIR TEMP: 13.9/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 61
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.90	1.683	7.950	1.090
2.	2.	9.30	1.866	7.950	1.286
5.	5.	10.38	6.822	7.470	5.049
10.	10.	9.74	24.041	5.830	18.492
20.	20.	7.54	28.245	5.360	22.069
30.	30.	7.25	28.967	5.180	22.672
50.	50.	6.94	29.386	5.180	23.040
75.	75.	7.21	29.890	4.610	23.401
100.	100.	7.84	30.283	3.540	23.625
150.	150.	8.09	30.388	2.820	23.671

STN: 6-7 DATE: 24-6-72 TIME: 1910
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1013
WIND: 0/0 AIR TEMP: 13.6/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 62
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	10.00	1.857	7.930	1.217
2.	2.	9.44	2.138	7.900	1.487
5.	5.	10.23	6.452	7.510	4.778
10.	10.	10.13	21.536	6.010	16.494
20.	20.	8.18	27.325	5.500	21.266
30.	30.	7.37	28.829	5.230	22.548
50.	50.	6.94	29.340	5.200	23.004
75.	75.	7.35	29.993	4.360	23.463
100.	100.	7.77	30.253	3.490	23.610
150.	150.	8.03	30.368	3.000	23.665

STN: 6-8 DATE: 24-6-72 TIME: 2110
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1013
WIND: 240/10 AIR TEMP: 13.3/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 63
WIRE ANGLE 4.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.70	3.129	7.740	2.239
2.	2.	9.31	3.728	7.760	2.743
5.	5.	9.92	8.685	7.820	6.549
10.	10.	10.66	19.396	6.210	14.762
20.	20.	8.51	27.056	5.620	21.011
30.	30.	7.39	28.680	5.220	22.430
50.	50.	6.95	29.325	5.140	22.991
75.	75.	7.05	29.776	4.830	23.331
100.	100.	7.83	30.280	3.370	23.623
150.	150.	8.06	30.386	2.820	23.675

STN: 6-9 DATE: 24-6-72 TIME: 2310
LAT: 49°40'N LONG: 123°11.9'W DEPTH: 146 BARO: 1013
WIND: 260/7 AIR TEMP: 13.3/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 64
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.80	2.055	7.850	1.390
2.	2.	8.65	2.938	7.900	2.179
5.	5.	12.95	10.568	7.000	7.613
10.	10.	10.15	22.326	5.920	17.103
20.	20.	8.07	0.0	5.490	0.0
30.	30.	7.34	28.727	5.230	22.473
50.	50.	6.96	29.332	5.210	22.995
75.	75.	7.27	29.928	4.460	23.422
100.	100.	7.83	30.280	3.440	23.623
150.	150.	8.05	30.380	2.830	23.671

STN: 6-10 DATE: 25-6-72 TIME: 0110
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1012.5
WIND: 220/10 AIR TEMP: 12.2/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 65
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.00	2.111	7.900	1.503
2.	2.	8.87	4.854	7.740	3.662
5.	5.	11.54	14.529	6.640	10.873
10.	10.	9.72	24.943	5.720	19.196
20.	20.	7.79	27.966	5.440	21.819
30.	30.	7.29	28.800	5.180	22.536
50.	50.	6.94	29.312	5.190	22.982
75.	75.	7.17	29.884	4.590	23.401
100.	100.	7.88	30.296	3.370	23.629
150.	150.	8.08	30.407	2.750	23.688

STN: 6-11 DATE: 25-6-72 TIME: 0310
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1012
WIND: 220/10 AIR TEMP: 12.2/11.1 SECCHI:

REFERENCE NUMBER- 72- 2- 66
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.30	1.686	7.950	1.145
2.	2.	9.88	7.557	7.440	5.675
5.	5.	14.04	7.879	7.340	5.377
10.	10.	9.34	25.698	5.710	19.838
20.	20.	7.73	28.119	5.440	21.946
30.	30.	7.27	28.908	5.180	22.623
50.	50.	6.96	29.380	5.220	23.033
75.	75.	7.24	29.943	4.470	23.439
100.	100.	7.87	30.309	3.390	23.641
145.	145.	8.08	30.399	2.800	23.681

STN: 6-12 DATE: 25-6-72 TIME: 0510
LAT: 49°40'N LONG: 123°12'W DEPTH: 152 BARO: 1011.5
WIND: 240/5 AIR TEMP: 11.7/11.1 SECCHI:

REFERENCE NUMBER- 72- 2- 67
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.50	1.162	8.060	0.795
2.	2.	8.89	1.904	7.940	1.349
5.	5.	11.38	17.947	6.310	13.537
10.	10.	9.03	26.112	5.640	20.203
20.	20.	7.85	28.173	5.390	21.973
30.	30.	7.29	28.867	5.170	22.588
50.	50.	6.94	29.335	5.180	23.000
75.	75.	7.14	29.819	4.820	23.354
100.	100.	7.73	30.245	3.540	23.610
145.	145.	8.04	0.0	2.950	0.0

STN: 6-13 DATE: 25-6-72 TIME: 0710
LAT: 49°40'N LONG: 123°12'W DEPTH: 150 BARO: 1011
WIND: 0/0 AIR TEMP: 12.2/11.1 SECCHI:

REFERENCE NUMBER- 72- 2- 68
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.30	1.831	7.930	1.259
2.	2.	8.66	2.007	7.900	1.448
5.	5.	11.98	15.147	6.590	11.287
10.	10.	9.21	26.120	5.640	20.185
20.	20.	7.76	28.172	5.390	21.983
30.	30.	7.25	28.870	5.160	22.597
50.	50.	6.98	29.279	5.130	22.951
75.	75.	6.94	29.673	5.110	23.265
100.	100.	7.81	30.276	3.490	23.624
145.	145.	8.00	30.358	3.180	23.661

STN: 6-14 DATE: 25-6-72 TIME: 0910
LAT: 49°40'N LONG: 123°12'W DEPTH: 150 BARO: 1011
WIND: 0/0 AIR TEMP: 12.2/11.7 SECCHI: 1

REFERENCE NUMBER- 72- 2- 69
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.00	2.391	7.950	1.722
2.	2.	9.07	7.897	7.440	6.022
5.	5.	11.31	10.552	7.080	7.831
10.	10.	9.26	25.553	5.750	19.736
20.	20.	8.02	27.805	5.510	21.663
30.	30.	7.36	28.702	5.240	22.450
50.	50.	7.00	29.169	5.130	22.862
75.	75.	6.96	29.693	5.110	23.279
100.	100.	7.80	30.271	3.510	23.620
145.	145.	8.01	30.366	3.050	23.665

STN: 6-15 DATE: 25-6-72 TIME: 1110
LAT: 49°40'N LONG: 123°12'W DEPTH: 152 BARO: 1011
WIND: 260/7 AIR TEMP: 12.8/11.7 SECCHI: 1

REFERENCE NUMBER- 72- 2- 70
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.70	1.356	7.990	0.933
2.	2.	9.08	7.290	7.480	5.547
5.	5.	11.78	11.595	6.930	8.574
10.	10.	9.61	25.148	5.740	19.371
20.	20.	8.11	27.498	5.540	21.411
30.	30.	7.30	28.759	5.240	22.503
50.	50.	7.04	29.259	5.190	22.928
75.	75.	6.96	29.665	5.040	23.257
100.	100.	7.77	30.262	3.540	23.617
145.	145.	8.01	30.367	3.070	23.667

STN: 6-16 DATE: 25-6-72 TIME: 1310
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1011.5
WIND: 190/10 AIR TEMP: 16.7/13.3 SECCHI: 1/blue-green

REFERENCE NUMBER- 72- 2- 71
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.00	1.170	8.060	0.765
2.	2.	8.51	1.636	8.000	1.167
5.	5.	10.23	8.892	7.240	6.675
10.	10.	10.01	23.538	5.830	18.063
20.	20.	8.05	27.576	5.540	21.479
30.	30.	7.30	28.768	5.230	22.510
50.	50.	6.99	29.309	5.240	22.973
75.	75.	7.11	29.828	4.790	23.366
100.	100.	7.84	30.299	3.470	23.637
145.	145.	8.05	30.388	2.920	23.678

STN: 6-17 DATE: 25-6-72 TIME: 1510
LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1012
WIND: 190/10 AIR TEMP: 17.8/12.8 SECCHI: 1/blue-green

REFERENCE NUMBER- 72- 2- 72
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.80	2.273	7.890	1.561
2.	2.	9.02	2.225	7.950	1.590
5.	5.	11.10	10.132	7.090	7.533
10.	10.	10.02	23.018	5.900	17.659
20.	20.	7.91	28.015	5.470	21.841
30.	30.	7.27	28.881	5.280	22.602
50.	50.	6.96	29.417	5.280	23.062
75.	75.	7.21	29.913	4.620	23.419
100.	100.	7.89	30.329	3.340	23.653
145.	145.	8.07	30.393	2.830	23.678

STN: 6-18 DATE: 25-6-72 TIME: 1710
LAT: 49°40'N LONG: 123°12'W DEPTH: 148 BARO: 1012
WIND: 190/15 AIR TEMP: 16.1/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 73
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.90	2.064	7.890	1.388
2.	2.	9.33	2.058	7.950	1.434
5.	5.	11.03	9.144	7.170	6.776
10.	10.	10.65	19.825	6.170	15.095
20.	20.	7.94	27.956	5.480	21.791
30.	30.	7.19	28.962	5.230	22.676
50.	50.	6.91	29.429	5.280	23.077
75.	75.	7.38	30.022	4.310	23.482
100.	100.	7.85	30.304	3.430	23.640
145.	145.	8.09	30.402	2.780	23.682

STN: 6-19 DATE: 25-6-72 TIME: 1910
LAT: 49°40'N LONG: 123°12'W DEPTH: 143 BARO: 1012
WIND: 210/10 AIR TEMP: 16.1/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 74
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.60	2.113	7.800	1.454
2.	2.	9.22	2.066	7.870	1.449
5.	5.	10.03	9.270	7.130	6.991
10.	10.	10.93	19.575	6.160	14.860
20.	20.	8.36	27.302	5.610	21.223
30.	30.	7.30	28.841	5.230	22.568
50.	50.	6.97	29.388	5.220	23.037
75.	75.	7.38	30.030	4.320	23.488
100.	100.	7.88	30.316	3.490	23.645
145.	145.	8.09	30.413	2.810	23.691

STN: 6-20 DATE: 25-6-72 TIME: 2110
LAT: 49°40'N LONG: 123°12'W DEPTH: 144 BARO: 1012.5
WIND: 0/0 AIR TEMP: 14.4/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 75
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	0.0	0.829	8.100	0.0
2.	2.	9.07	1.625	8.000	1.116
5.	5.	11.17	10.642	7.040	7.919
10.	10.	11.02	19.161	6.220	14.527
20.	20.	8.54	26.974	5.620	20.944
30.	30.	7.44	28.591	5.280	22.354
50.	50.	6.97	29.264	5.130	22.940
75.	75.	7.11	29.827	4.800	23.364
100.	100.	7.83	30.300	3.440	23.640
145.	145.	8.07	30.400	2.820	23.684

STN: 6-21 DATE: 25-6-72 TIME: 2310
LAT: 49°40'N LONG: 123°12'W DEPTH: 150 BARO: 1013
WIND: 0/0 AIR TEMP: 12.8/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 76
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.70	1.969	7.900	1.415
2.	2.	9.22	2.184	7.950	1.542
5.	5.	11.36	11.083	6.980	8.234
10.	10.	10.16	22.794	5.910	17.464
20.	20.	8.72	27.132	5.540	21.041
30.	30.	7.46	28.549	5.340	22.317
50.	50.	7.01	29.190	5.170	22.878
75.	75.	6.98	29.708	4.970	23.287
100.	100.	7.82	30.283	3.490	23.626
145.	145.	8.04	30.377	2.980	23.671

STN: 6-22 DATE: 26-6-72 TIME: 0110
 LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1013.5
 WIND: 0/0 AIR TEMP: 11.7/11.1 SECCHI:

REFERENCE NUMBER- 72- 2- 77
 WIRE ANGLE 0.

DEPTH	WIRE	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.80	1.577	7.950	1.099
2.	2.	11.72	1.306	7.990	0.610
5.	5.	11.89	16.662	6.360	12.468
10.	10.	9.65	24.981	5.730	19.236
20.	20.	8.44	27.399	5.490	21.288
30.	30.	7.37	28.722	5.280	22.465
50.	50.	7.00	29.259	5.170	22.932
75.	75.	6.96	29.688	5.030	23.274
100.	100.	7.80	30.305	3.550	23.647
145.	145.	8.03	30.368	3.050	23.664

STN: 6-23 DATE: 26-6-72 TIME: 0310
 LAT: 49°40'N LONG: 123°12'W DEPTH: 146 BARO: 1013.5
 WIND: 0/0 AIR TEMP: 11.1/10.6 SECCHI:

REFERENCE NUMBER- 72- 2- 78
 WIRE ANGLE 0.

DEPTH	WIRE	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.70	1.237	7.950	0.840
2.	2.	9.06	3.367	7.860	2.482
5.	5.	11.07	19.331	6.190	14.651
10.	10.	9.35	25.811	5.680	19.924
20.	20.	7.90	28.105	5.430	21.913
30.	30.	7.28	28.852	5.230	22.578
50.	50.	6.97	29.306	5.230	22.974
75.	75.	7.01	29.746	4.930	23.313
100.	100.	7.84	30.297	3.460	23.635
145.	145.	8.04	30.379	2.920	23.672

STN: 6-24 DATE: 26-6-72 TIME: 0510
LAT: 49°40'N LONG: 123°12'W DEPTH: 137 BARO: 1013
WIND: 200/6 AIR TEMP: 11.7/11.1 SECCHI:

REFERENCE NUMBER- 72- 2- 79
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.60	1.002	8.050	0.663
2.	2.	9.05	2.653	7.880	1.924
5.	5.	11.20	18.483	6.250	13.977
10.	10.	9.04	26.531	5.570	20.529
20.	20.	7.52	28.399	5.350	22.192
30.	30.	7.23	28.950	5.210	22.661
50.	50.	6.91	29.360	5.180	23.023
75.	75.	7.10	29.830	4.770	23.368
100.	100.	7.83	30.292	3.500	23.633
145.	145.	8.06	30.387	2.860	23.675

STN: 6-25 DATE: 26-6-72 TIME: 0710
LAT: 49+40'N LONG: 123°12'W DEPTH: 144 BARO: 1014
WIND: 0/0 AIR TEMP: 10.6/10.6 SECCHI:

REFERENCE NUMBER- 72- 2- 80
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	8.70	1.099	8.160	0.732
2.	2.	8.92	4.743	7.700	3.571
5.	5.	10.36	22.099	5.910	16.896
10.	10.	9.14	26.221	5.640	20.273
20.	20.	7.77	28.263	5.430	22.054
30.	30.	7.31	28.875	5.230	22.592
50.	50.	6.98	29.307	5.210	22.973
75.	75.	7.09	29.796	4.830	23.342
100.	100.	7.82	30.286	3.490	23.629
145.	145.	8.04	30.388	2.920	23.678

STN: 6-26 DATE: 26-6-72 TIME: 0910
LAT: 49°40'N LONG: 123°12'W DEPTH: 154 BARO: 1015
WIND: 0/0 AIR TEMP: 11.7/11.1 SECCHI: 1

REFERENCE NUMBER- 72- 2- 81
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	0.0	0.624	8.210	0.0
2.	2.	7.52	1.691	8.090	1.275
5.	5.	11.16	18.500	6.300	13.995
10.	10.	9.11	26.258	5.650	20.306
20.	20.	7.80	28.246	5.400	22.037
30.	30.	7.24	28.872	5.220	22.598
50.	50.	6.97	29.269	5.190	22.945
75.	75.	6.98	29.713	4.980	23.291
100.	100.	7.79	30.283	3.640	23.631
145.	145.	8.06	30.390	2.920	23.678

STN: 7 DATE: 26-6-72 TIME: 1110
LAT: 49°31'N LONG: 123°20'W DEPTH: 228 BARO: 1016
WIND: 0/0 AIR TEMP: 12.2/11.7 SECCHI:

REFERENCE NUMBER- 72- 2- 82
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	11.70	3.497	7.590	2.315
2.	2.	12.14	7.212	7.300	5.137
5.	5.	12.51	18.247	6.390	13.592
10.	10.	10.17	25.663	5.670	19.688
20.	20.	8.23	27.950	5.480	21.747
30.	30.	7.61	28.966	5.280	22.625
50.	50.	7.01	29.406	5.340	23.046
75.	75.	7.15	29.977	5.250	23.477
100.	100.	6.98	29.695	5.040	23.277
150.	150.	7.65	30.453	4.150	23.783
200.	200.	7.84	30.623	3.830	23.891
220.	220.	7.89	30.624	3.900	23.884

STN: 8-1 DATE: 26-6-72 TIME: 1310
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1017
WIND: 0/0 AIR TEMP: 14.4/13.9 SECCHI:

REFERENCE NUMBER- 72- 2- 83
WIRE ANGLE 0.

DEPTH	WIRE	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.70	4.490	7.560	2.819
2.	2.	13.90	6.146	7.510	4.065
5.	5.	13.22	11.322	6.750	8.152
10.	10.	10.29	24.059	5.740	18.427
20.	20.	8.15	28.274	5.310	22.012
30.	30.	7.45	28.979	5.140	22.656
50.	50.	6.92	29.380	5.240	23.037
75.	75.	6.88	29.686	5.250	23.283
100.	100.	7.10	30.058	4.790	23.546
150.	150.	7.76	30.506	3.710	23.809
200.	200.	7.86	30.579	3.190	23.853
250.	250.	7.84	30.597	3.290	23.870

STN: 8-2 DATE: 26-6-72 TIME: 1510
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1017
WIND: 0/0 AIR TEMP: 15.6/15.6 SECCHI: 3/brown-green

REFERENCE NUMBER- 72- 2- 84
WIRE ANGLE 0.

DEPTH	WIRE	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.20	4.739	7.640	2.936
2.	2.	14.28	6.852	7.290	4.550
5.	5.	12.52	16.568	6.400	12.298
10.	10.	10.60	23.655	5.750	18.066
20.	20.	8.14	28.290	5.270	22.025
30.	30.	7.49	28.933	5.180	22.614
50.	50.	6.95	29.306	5.240	22.975
75.	75.	6.89	29.668	5.230	23.268
100.	100.	7.12	30.063	4.760	23.548
150.	150.	7.72	30.479	3.860	23.795
200.	200.	7.79	30.580	3.590	23.863
220.	220.	7.82	30.586	3.440	23.864

STN: 8-3 DATE: 26-6-72 TIME: 1710
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1017
WIND: 0/0 AIR TEMP: 15.6/15.0 SECCHI: 3

REFERENCE NUMBER- 72- 2- 85
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.20	4.172	7.250	3.100
2.	2.	13.69	9.228	6.990	6.469
5.	5.	12.36	16.977	6.320	12.639
10.	10.	10.06	24.923	5.640	19.131
20.	20.	8.25	28.060	5.350	21.830
30.	30.	7.47	28.938	5.190	22.621
50.	50.	6.92	29.355	5.250	23.019
75.	75.	6.91	29.636	5.230	23.240
100.	100.	7.10	30.046	4.770	23.537
150.	150.	7.70	30.455	3.910	23.778
200.	200.	7.79	30.574	3.670	23.860
220.	220.	7.82	30.590	3.430	23.868

STN: 8-4 DATE: 26-6-72 TIME: 1910
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1017
WIND: 0/0 AIR TEMP: 15.0/15.0 SECCHI: 2.5

REFERENCE NUMBER- 72- 2- 86
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	9.30	6.545	7.080	4.945
2.	2.	13.56	9.694	6.930	6.847
5.	5.	12.16	18.004	6.230	13.461
10.	10.	9.72	25.623	5.570	19.724
20.	20.	8.06	28.368	5.230	22.097
30.	30.	7.49	28.931	5.190	22.614
50.	50.	6.94	29.333	5.240	22.998
75.	75.	6.91	29.639	5.260	23.243
100.	100.	7.05	30.013	4.850	23.518
150.	150.	7.69	30.459	3.900	23.782
200.	200.	7.78	30.568	3.690	23.856
220.	220.	7.81	30.591	3.460	23.869

STN: 8-5 DATE: 26-6-72 TIME: 2110
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018
WIND: 0/0 AIR TEMP: 13.3/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 87
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	0.0	6.441	7.250	0.0
2.	2.	13.85	7.739	7.130	5.298
5.	5.	12.81	14.112	6.500	10.362
10.	10.	10.13	24.779	5.610	19.007
20.	20.	8.32	28.035	5.250	21.802
30.	30.	7.46	28.961	5.180	22.640
50.	50.	6.89	29.397	5.220	23.055
75.	75.	6.90	29.656	5.230	23.257
100.	100.	7.10	30.068	4.810	23.554
150.	150.	7.65	30.438	4.030	23.772
200.	200.	7.84	30.579	3.160	23.856
220.	220.	7.83	30.597	3.310	23.872

STN: 8-6 DATE: 26-6-72 TIME: 2310
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018
WIND: 0/0 AIR TEMP: 13.3/12.8 SECCHI:

REFERENCE NUMBER- 72- 2- 88
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	0.0	5.817	7.180	0.0
2.	2.	13.79	8.791	6.990	6.118
5.	5.	12.50	16.719	6.280	12.418
10.	10.	10.26	24.577	5.650	18.832
20.	20.	8.42	27.953	5.330	21.724
30.	30.	7.50	28.891	5.130	22.580
50.	50.	6.92	29.348	5.230	23.013
75.	75.	6.90	29.639	5.260	23.243
100.	100.	7.05	30.032	4.820	23.532
150.	150.	7.71	30.457	3.920	23.778
200.	200.	7.86	30.583	3.130	23.856
220.	220.	7.80	30.597	3.360	23.875

STN: 8-7 DATE: 27-6-72 TIME: 0110
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018.5
WIND: 0/0 AIR TEMP: 12.8/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 89
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.80	5.586	7.280	3.649
2.	2.	13.62	9.181	6.920	6.443
5.	5.	12.47	16.281	6.320	12.085
10.	10.	10.22	24.763	5.640	18.982
20.	20.	8.42	27.975	5.340	21.741
30.	30.	7.52	28.885	5.170	22.574
50.	50.	6.98	29.321	5.240	22.984
75.	75.	6.89	29.660	5.230	23.261
100.	100.	7.06	30.020	4.870	23.522
150.	150.	7.70	30.447	3.940	23.772
200.	200.	7.87	30.588	3.060	23.859
220.	220.	7.83	30.607	3.420	23.879

STN: 8-8 DATE: 27-6-72 TIME: 0310
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018.5
WIND: 0/0 AIR TEMP: SECCHI:

REFERENCE NUMBER- 72- 2- 90
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.80	5.988	7.110	3.959
2.	2.	13.71	9.845	6.820	6.940
5.	5.	12.38	17.497	6.260	13.035
10.	10.	10.09	24.896	5.590	19.105
20.	20.	8.22	28.084	5.340	21.853
30.	30.	7.51	28.812	5.180	22.517
50.	50.	6.99	29.289	5.230	22.957
75.	75.	6.91	29.608	5.260	23.217
100.	100.	6.97	29.938	4.970	23.469
150.	150.	7.66	30.434	4.000	23.767
200.	200.	7.87	30.577	3.090	23.851
220.	220.	7.83	30.586	3.340	23.863

STN: 8-9 DATE: 27-6-72 TIME: 0510
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018
WIND: 0/0 AIR TEMP: 12.2/12.2 SECCHI:

REFERENCE NUMBER- 72- 2- 91
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.50	5.354	7.350	3.514
2.	2.	13.59	9.846	6.790	6.960
5.	5.	11.96	18.826	6.160	14.126
10.	10.	9.94	25.384	5.550	19.506
20.	20.	7.98	28.112	5.340	21.907
30.	30.	7.50	28.812	5.180	22.519
50.	50.	6.97	29.300	5.280	22.968
75.	75.	6.92	29.528	5.280	23.154
100.	100.	6.91	29.852	5.060	23.409
150.	150.	7.65	30.424	4.000	23.760
200.	200.	7.87	30.573	3.130	23.847
220.	220.	7.87	30.593	3.280	23.862

STN: 8-10 DATE: 27-6-72 TIME: 0710
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018.5
WIND: 0/0 AIR TEMP: 12.8/12.8 SECCHI: 3

REFERENCE NUMBER- 72- 2- 92
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.60	4.397	7.430	2.899
2.	2.	13.54	9.564	6.840	6.751
5.	5.	12.27	18.033	6.190	13.466
10.	10.	9.69	25.658	5.580	19.756
20.	20.	7.99	28.212	5.390	21.985
30.	30.	7.51	28.828	5.200	22.529
50.	50.	6.97	29.269	5.240	22.945
75.	75.	6.98	29.593	5.230	23.197
100.	100.	6.93	29.909	5.000	23.451
150.	150.	7.71	30.457	3.900	23.779
200.	200.	7.85	30.582	3.170	23.857
220.	220.	7.84	30.593	3.310	23.866

STN: 8-11 DATE: 27-6-72 TIME: 0910
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1019
WIND: 0/0 AIR TEMP: 13.9/13.3 SECCHI: 3

REFERENCE NUMBER- 72- 2- 93
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	0.0	3.601	7.380	0.0
2.	2.	13.93	8.427	6.950	5.816
5.	5.	13.06	14.212	6.510	10.400
10.	10.	9.81	25.373	5.630	19.517
20.	20.	7.89	28.381	5.290	22.130
30.	30.	7.46	28.905	5.170	22.596
50.	50.	6.94	29.308	5.230	22.978
75.	75.	6.92	29.601	5.280	23.211
100.	100.	7.01	29.980	4.870	23.497
150.	150.	7.72	30.478	3.800	23.793
200.	200.	7.86	30.583	3.130	23.856
220.	220.	7.84	30.595	3.230	23.868

STN: 8-12 DATE: 27-6-72 TIME: 1110
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1020
WIND: 0/0 AIR TEMP: 14.4/13.9 SECCHI: 3

REFERENCE NUMBER- 72- 2- 94
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.00	5.875	7.300	3.841
2.	2.	13.82	6.702	7.230	4.506
5.	5.	13.15	11.276	6.670	8.128
10.	10.	9.58	26.064	5.510	20.087
20.	20.	7.90	28.420	5.260	22.160
30.	30.	7.50	28.920	5.180	22.603
50.	50.	6.94	29.316	5.230	22.985
75.	75.	6.94	29.633	5.230	23.234
100.	100.	7.08	30.017	4.790	23.518
150.	150.	7.78	30.497	3.600	23.800
200.	200.	7.86	30.592	3.090	23.863
220.	220.	7.82	30.589	3.340	23.867

STN: 8-13 DATE: 27-6-72 TIME: 1310
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1022
WIND: 0/0 AIR TEMP: 15.0/13.9 SECCHI: 3/brown-green

REFERENCE NUMBER- 72- 2- 95
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.40	4.835	8.410	3.128
2.	2.	13.84	6.478	7.750	4.330
5.	5.	13.43	11.460	7.410	8.226
10.	10.	9.93	25.204	6.270	19.367
20.	20.	7.94	28.347	5.940	22.097
30.	30.	7.48	28.908	5.780	22.596
50.	50.	6.96	29.306	5.880	22.974
75.	75.	6.92	29.622	5.840	23.228
100.	100.	7.05	30.008	5.410	23.514
150.	150.	7.81	30.512	3.770	23.807
200.	200.	7.78	30.569	4.190	23.856
220.	220.	7.82	30.589	3.870	23.866

STN: 8-14 DATE: 27-6-72 TIME: 1510
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1022
WIND: 0/0 AIR TEMP: 15.0/13.9 SECCHI:

REFERENCE NUMBER- 72- 2- 96
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.30	3.497	8.540	2.241
2.	2.	14.29	7.486	8.010	5.036
5.	5.	12.65	15.750	7.060	11.649
10.	10.	10.18	24.209	6.360	18.558
20.	20.	7.92	27.954	6.050	21.793
30.	30.	7.56	28.822	5.850	22.519
50.	50.	7.00	29.276	5.870	22.946
75.	75.	6.96	29.615	5.810	23.217
100.	100.	7.10	30.059	5.580	23.548
150.	150.	7.70	30.492	4.270	23.807
200.	200.	7.80	30.567	4.170	23.853
220.	220.	7.83	30.583	3.950	23.860

STN: 8-15 DATE: 27-6-72 TIME: 1710
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1020
WIND: 0/0 AIR TEMP: 15.6/14.4 SECCHI:

REFERENCE NUMBER- 72- 2- 97
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.00	4.058	8.630	2.584
2.	2.	13.95	8.109	7.760	5.569
5.	5.	12.20	18.430	6.890	13.783
10.	10.	9.90	25.197	6.270	19.367
20.	20.	8.10	28.069	6.050	21.858
30.	30.	7.51	28.833	5.840	22.533
50.	50.	6.98	29.288	5.900	22.957
75.	75.	6.96	29.641	5.880	23.237
100.	100.	7.04	30.027	5.400	23.530
150.	150.	7.71	30.512	4.420	23.822
200.	200.	7.78	30.596	4.210	23.878
220.	220.	7.81	30.600	4.020	23.877

STN: 8-16 DATE: 27-6-72 TIME: 1910
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1019
WIND: 0/0 AIR TEMP: 14.4/13.9 SECCHI:

REFERENCE NUMBER- 72- 2- 98
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	0.0	4.413	8.450	0.0
2.	2.	14.08	8.586	7.700	5.914
5.	5.	12.45	15.982	7.080	11.858
10.	10.	9.90	25.362	6.240	19.494
20.	20.	8.18	28.076	6.000	21.852
30.	30.	7.51	28.853	5.840	22.549
50.	50.	6.98	29.283	5.870	22.954
75.	75.	6.98	29.601	5.880	23.203
100.	100.	6.93	29.905	5.590	23.449
150.	150.	7.68	30.459	4.400	23.784
200.	200.	7.78	30.571	4.180	23.859
220.	220.	7.80	30.586	4.110	23.868

STN: 8-17 DATE: 27-6-72 TIME: 2110
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1019.5
WIND: 0/0 AIR TEMP: 13.9/13.3 SECCHI:

REFERENCE NUMBER- 72- 2- 99
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.70	4.555	8.330	2.869
2.	2.	14.16	8.471	7.650	5.814
5.	5.	12.66	16.166	7.030	11.967
10.	10.	10.10	25.103	6.260	19.264
20.	20.	8.18	27.943	6.050	21.749
30.	30.	7.52	28.893	5.850	22.579
50.	50.	7.04	29.256	5.860	22.925
75.	75.	7.02	29.627	5.800	23.219
100.	100.	6.94	29.909	5.670	23.451
150.	150.	7.64	30.431	4.500	23.767
200.	200.	7.87	30.589	3.600	23.860
220.	220.	7.87	30.593	3.620	23.863

STN: 8-18 DATE: 27-6-72 TIME: 2310
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1019.5
WIND: 0/0 AIR TEMP: 13.3/13.3 SECCHI:

REFERENCE NUMBER- 72- 2-100
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.00	6.098	8.190	4.013
2.	2.	14.06	8.966	7.710	6.209
5.	5.	12.95	14.778	7.180	10.853
10.	10.	10.19	24.321	6.360	18.644
20.	20.	8.39	27.799	6.100	21.608
30.	30.	7.57	28.711	5.850	22.430
50.	50.	7.27	29.162	5.910	22.823
75.	75.	7.00	29.590	5.870	23.193
100.	100.	6.96	29.908	5.620	23.446
150.	150.	7.69	30.445	4.390	23.772
200.	200.	7.86	30.597	3.510	23.867
220.	220.	7.85	30.598	3.660	23.869

STN: 8-19 DATE: 28-6-72 TIME: 0110
LAT: 49+31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018.5
WIND: 0/0 AIR TEMP: 13.3/13.3 SECCHI:

REFERENCE NUMBER- 72- 2-101
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.40	4.968	8.370	3.231
2.	2.	14.09	8.948	7.800	6.191
5.	5.	12.14	18.104	6.850	13.541
10.	10.	10.06	25.239	6.300	19.376
20.	20.	8.31	27.872	6.100	21.675
30.	30.	7.55	28.734	5.830	22.451
50.	50.	7.20	29.200	5.850	22.861
75.	75.	6.97	29.593	5.860	23.198
100.	100.	6.97	29.914	5.560	23.450
150.	150.	7.71	30.468	4.320	23.787
200.	200.	7.87	30.584	3.620	23.856
220.	220.	7.85	30.597	3.590	23.868

STN: 8-20 DATE: 28-6-72 TIME: 0310
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018
WIND: 0/0 AIR TEMP: 13.9/13.3 SECCHI:

REFERENCE NUMBER- 72- 2-102
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.90	6.200	8.160	4.107
2.	2.	13.85	10.491	7.490	7.414
5.	5.	11.68	19.930	6.820	15.022
10.	10.	9.90	25.409	6.250	19.531
20.	20.	8.52	27.586	6.050	21.423
30.	30.	7.57	28.710	5.810	22.430
50.	50.	7.17	29.166	5.870	22.838
75.	75.	6.95	29.551	5.870	23.167
100.	100.	6.91	29.860	5.640	23.416
150.	150.	7.70	30.454	4.340	23.777
200.	200.	7.87	30.593	3.540	23.862
220.	220.	7.84	30.596	3.620	23.869

STN: 8-21 DATE: 28-6-72 TIME: 0510
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1017
WIND: 0/0 AIR TEMP: 13.3/13.3 SECCHI:

REFERENCE NUMBER- 72- 2-103
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.50	6.189	8.080	4.158
2.	2.	13.59	12.043	7.330	8.649
5.	5.	11.47	20.542	6.710	15.526
10.	10.	9.91	25.279	6.220	19.428
20.	20.	8.21	28.020	6.000	21.805
30.	30.	7.59	28.736	5.840	22.447
50.	50.	7.67	29.193	5.850	22.794
75.	75.	6.95	29.546	5.880	23.164
100.	100.	6.90	29.873	5.630	23.426
150.	150.	7.70	30.457	4.390	23.780
200.	200.	7.87	30.593	3.510	23.863
220.	220.	7.86	30.600	3.570	23.870

STN: 8-22 DATE: 28-6-72 TIME: 0710
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018
WIND: 0/0 AIR TEMP: 13.9/13.9 SECCHI:

REFERENCE NUMBER- 72- 2-104
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.30	4.758	8.220	3.083
2.	2.	13.79	10.271	7.540	7.255
5.	5.	11.08	21.701	6.570	16.481
10.	10.	9.35	26.452	6.160	20.423
20.	20.	7.97	28.308	6.080	22.062
30.	30.	7.53	28.845	5.830	22.540
50.	50.	7.06	29.255	5.910	22.922
75.	75.	6.95	29.567	5.890	23.180
100.	100.	6.98	29.944	5.550	23.473
150.	150.	7.71	30.466	4.330	23.786
200.	200.	7.87	30.592	3.470	23.862
220.	220.	7.86	30.596	3.710	23.867

STN: 8-23 DATE: 28-6-72 TIME: 0910
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1018
WIND: 0/0 AIR TEMP: 13.9/13.9 SECCHI: 3/green-brown

REFERENCE NUMBER- 72- 2-105
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.40	4.498	8.320	2.868
2.	2.	14.06	7.430	7.810	5.029
5.	5.	11.78	19.314	6.770	14.530
10.	10.	9.43	25.954	6.250	20.024
20.	20.	8.00	28.184	6.010	21.962
30.	30.	7.50	28.846	5.840	22.545
50.	50.	7.04	29.233	5.860	22.907
75.	75.	6.98	29.628	5.870	23.225
100.	100.	6.99	29.963	5.480	23.486
150.	150.	7.72	30.477	4.290	23.793
200.	200.	7.87	30.592	3.570	23.862
220.	220.	7.86	30.660	3.670	23.916

STN: 8-24 DATE: 28-6-72 TIME: 1110
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1019.5
WIND: 0/0 AIR TEMP: 15.0/15.0 SECCHI: 3/green-brown

REFERENCE NUMBER- 72- 2-106
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	13.50	4.892	8.410	3.158
2.	2.	14.06	6.820	8.100	4.559
5.	5.	12.03	17.875	6.870	13.381
10.	10.	9.40	26.078	6.230	20.125
20.	20.	7.92	28.349	5.940	22.101
30.	30.	7.50	28.938	5.890	22.617
50.	50.	6.98	29.298	5.880	22.966
75.	75.	6.99	29.622	5.880	23.219
100.	100.	7.03	29.996	5.550	23.507
150.	150.	7.79	30.504	4.030	23.804
200.	200.	7.81	30.581	3.940	23.862
220.	220.	7.83	30.593	3.910	23.869

STN: 8-25 DATE: 28-6-72 TIME: 1310
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1020
WIND: 0/0 AIR TEMP: 17.8/16.7 SECCHI: 2/green-brown

REFERENCE NUMBER- 72- 2-107
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.50	4.401	8.490	2.916
2.	2.	14.09	6.578	8.060	4.369
5.	5.	12.24	17.844	6.860	13.326
10.	10.	9.54	26.129	6.130	20.144
20.	20.	7.96	28.327	5.870	22.078
30.	30.	7.52	28.923	5.790	22.602
50.	50.	6.98	29.292	5.840	22.962
75.	75.	6.96	29.633	5.800	23.232
100.	100.	7.17	30.082	5.170	23.557
150.	150.	7.80	30.504	3.830	23.803
200.	200.	7.81	30.578	4.080	23.860
220.	220.	7.84	30.597	3.720	23.870

STN: 8-26 DATE: 28-6-72 TIME: 1510
LAT: 49°31.5'N LONG: 123°27'W DEPTH: 221 BARO: 1020
• WIND: 0/0 AIR TEMP: 17.8/16.7 SECCHI: 3/green-brown

REFERENCE NUMBER- 72- 2-108
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	12.30	3.937	8.580	2.582
2.	2.	14.16	7.170	7.860	4.813
5.	5.	12.41	17.884	6.760	13.329
10.	10.	9.87	25.489	6.140	19.598
20.	20.	8.07	28.143	6.050	21.919
30.	30.	7.51	28.927	5.840	22.607
50.	50.	6.96	29.299	5.890	22.969
75.	75.	6.96	29.641	5.790	23.238
100.	100.	7.19	30.100	5.140	23.567
150.	150.	7.80	30.511	4.050	23.809
200.	200.	7.80	30.593	4.250	23.873

STN: 9 DATE: 28-6-72 TIME: 1610
LAT: 49°24.6'N LONG: 123°28.6'W DEPTH: 84 BARO: 1020
WIND: 0/0 AIR TEMP: 18.9/17.2 SECCHI: 4/yellow-brown

REFERENCE NUMBER- 72- 2-109
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.50	7.003	8.220	4.466
2.	2.	14.64	8.140	8.270	5.481
5.	5.	12.46	19.514	6.860	14.575
10.	10.	9.43	26.018	6.240	20.073
20.	20.	8.36	27.862	5.950	21.661
30.	30.	7.62	28.811	5.790	22.502
50.	50.	7.30	29.361	5.690	22.975
75.	75.	7.08	29.616	5.740	23.202

STN: 11 DATE: 28-6-72 TIME: 1700
LAT: 49°25.5'N LONG: 123°22'W DEPTH: 247 BARO: 1020
WIND: 0/0 AIR TEMP: 18.9/17.2 SECCHI: 2/dk. green

REFERENCE NUMBER- 72- 2-110
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.40	5.897	8.670	3.797
2.	2.	13.76	9.983	8.620	7.038
5.	5.	12.47	20.555	6.880	15.375
10.	10.	11.43	25.482	6.670	19.347
20.	20.	9.33	27.791	6.050	21.466
30.	30.	8.18	28.855	5.720	22.461
50.	50.	7.79	29.383	5.630	22.926
75.	75.	7.60	29.665	5.620	23.174
100.	100.	7.25	29.955	5.480	23.446
150.	150.	7.81	30.484	4.660	23.785
200.	200.	7.80	30.581	4.280	23.864
230.	230.	7.90	30.643	4.440	23.898

STN: 10 DATE: 28-6-72 TIME: 1745
LAT: 49°23.5'N LONG: 123°25'W DEPTH: BARO: 1020
WIND: 0/0 AIR TEMP: 17.8/16.6 SECCHI: 3/dk. green

REFERENCE NUMBER- 72- 2-111
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	15.40	6.925	8.580	4.423
2.	2.	14.58	8.470	8.410	5.745
5.	5.	13.55	19.753	7.080	14.574
10.	10.	10.39	26.270	6.400	20.125
20.	20.	8.96	28.466	5.890	22.047
30.	30.	8.15	28.961	5.700	22.547
50.	50.	7.77	29.337	5.600	22.894
75.	75.	7.63	29.703	5.550	23.199
100.	100.	7.59	29.974	5.270	23.417
130.	130.	7.59	30.276	4.990	23.653

STN: 1 DATE: 28-6-72 TIME: 1905
LAT: 49°19'N LONG: 123°22'W DEPTH: BARO: 1020
WIND: 0/0 AIR TEMP: SECCHI:

REFERENCE NUMBER- 72- 2-112
WIRE ANGLE 0.

DEPTH	WIREL	TEMP	SALINITY	O2	SIGMA-T
-0.	0.	14.80	5.092	8.380	3.115
2.	2.	13.28	10.501	7.740	7.512
5.	5.	10.45	23.638	6.360	18.076
10.	10.	10.14	25.972	6.270	19.931
20.	20.	9.57	28.299	5.890	21.826
30.	30.	8.38	29.062	5.580	22.595
50.	50.	8.04	29.601	5.420	23.063
75.	75.	7.34	29.865	5.640	23.364
100.	100.	7.33	30.211	5.200	23.637
150.	150.	7.81	30.504	4.810	23.801
200.	200.	7.86	30.588	4.600	23.860
230.	230.	7.91	30.722	4.520	23.958

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